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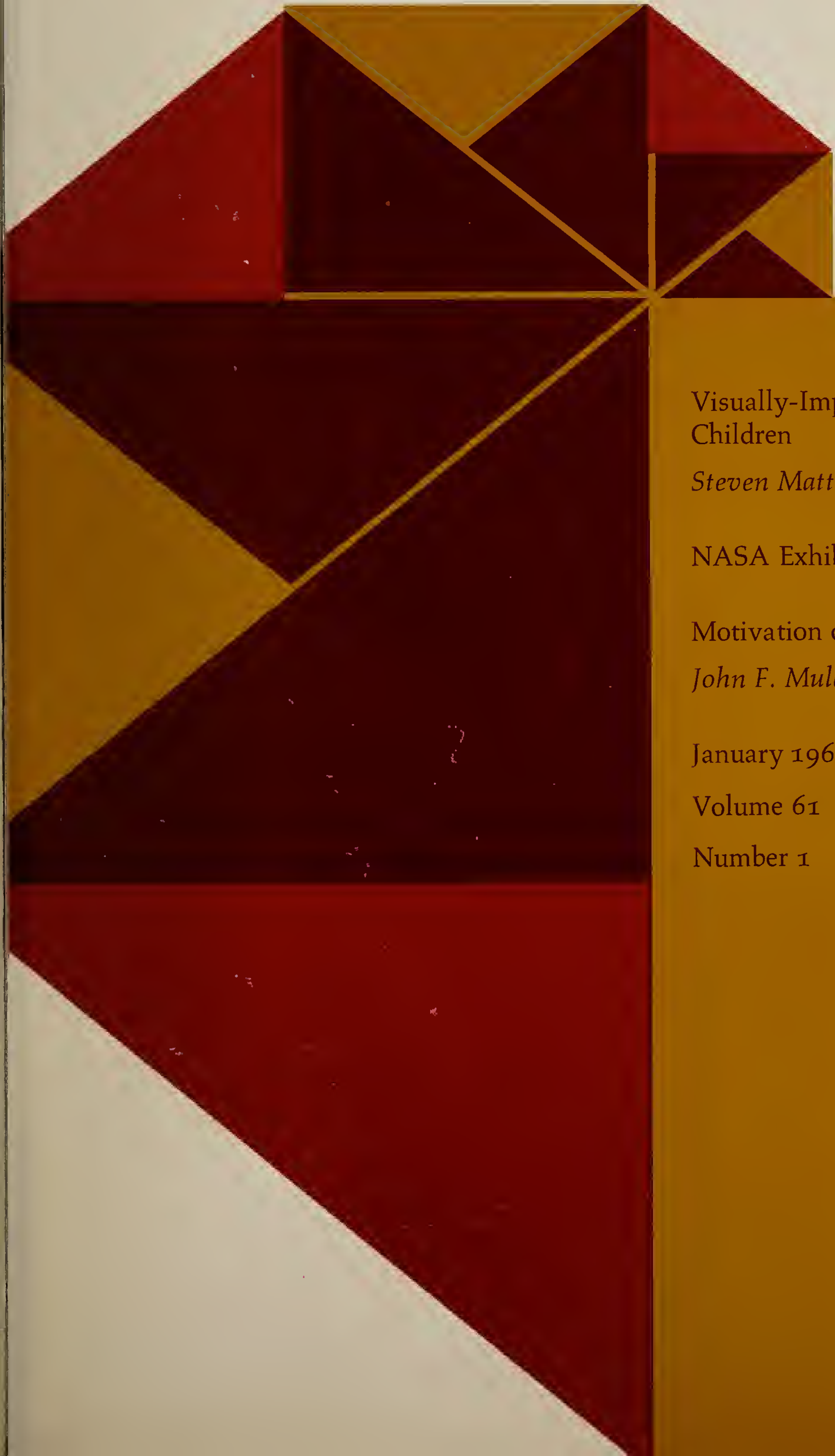

Visually-Impaired Multi-Handicapped Children

Steven Mattis

NASA Exhibit for the Blind

Motivation of the Difficult Blind Client

John F. Muldoon

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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

An Experimental Approach to Treatment of Visually Impaired Multi-Handicapped Children

STEVEN MATTIS, Ph.D.

Dr. Mattis is director of the Day Treatment Program at The Jewish Guild for the Blind in New York City. He is co-director of operations under grant 1044 from the National Institute of Mental Health.

Our mental health center for visually impaired multi-handicapped children was established at The Jewish Guild for the Blind in 1962. The center is jointly funded by N.I.M.H. and the Guild, and is composed of a demonstration research project directed by Walter Kass, Ph.D. and a psychiatric clinic directed by Arthur E. Gillman, M.D.

As a mental health facility, we, of course, see a biased or special sample of visually impaired children. Most of the children served have congenital visual impairment usually the result of RLF, and all except the very young had been previously known to other agencies and clinics. Parents have come to the mental health center because, in addition to the child's sensory problems, there is usually some disturbance in behavior and/or learning. Our patient population has previously reported diagnoses which range from "autism," "childhood schizophrenia," and "profound retardation" to the more usual diagnosis of "neurotic adjustment reaction." Most of the children, however, were viewed as neurotic or borderline with functional mild or moderate retardation.

While parents had been to many specialists, it was noted that, too often, the child's problems were segmented—that is, the parents went to an ophthalmologist for visual difficulties, to the school for learning disabilities, and to a psychologist or psychiatrist for behavior and management problems. The various specialists often did not have access to information of others or were not aware of difficulties which could affect assessment in their own area. In an effort to provide a comprehensive and integrated evaluation, a panel of specialists was obtained so that, as part of the routine clinic work-up, the child is seen by an ophthalmologist, a pediatric-neurologist, an electroencephalographer, a psychiatrist, a psychologist, a speech and hearing consultant, and an educational consultant. A caseworker sees the child and, in addition, maintains contact with the parents during the diagnostic evaluation. A case conference is held in which a diagnostic evaluation and treatment plan are evolved with all the data and most of the examining personnel present.

Since we served an unusual patient population, it was necessary in the beginning for all specialists to create new or adapt existing diagnostic pro-

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This program is supported in part by N.I.M.H. Grant 1044, "A Mental Health Center for Disturbed Blind Children," Walter Kass, Ph.D., project director.

Dr. Mattis presented this paper at the Council for Exceptional Children's 44th International Convention in April, 1966.

cedures. While development of diagnostic tools was an important initial goal, it was subsequently observed that the knowledge generated by our evolving procedures necessitated development of new treatment modalities.

The clinic and research staff noted that most children evaluated at the clinic demonstrated either global or specific concept deficits. These deficiencies in perceptual-cognitive functioning did not appear to be consonant with or predicted by theoretical frameworks in which interpersonal or parent-child stress is the predominant factor. The children's adjustment and developmental difficulties appeared to be best understood if one postulated a C.N.S. disruption of integrative functioning. Thus, one could view the child as an aphasic or conceptually impaired child whose difficulties are compounded by lack of the primary information and corrective feedback modality, vision. This framework does not preclude the observation that such children are emotionally disturbed or manifest poor reality testing. The working hypothesis our evaluations suggest, however, is that for many of our children, reality testing and psychological defenses are poor because they are predicated on inadequate conceptual ability, and that anxiety levels are high because the child is both unable to comprehend what is required of him and is limited cognitively to a narrow range of appropriate responses to his environment. Thus, the theoretical framework evolved in working with our particular patient population is not that psychological stress, the result of disruptive parent-child interaction, functionally retards the development of intellectual and adaptive processes, but rather that conceptual deficits of probable organic etiology result in inappropriate behavior and high anxiety.

Stress in parent-child interaction is, of course, present not only because the child cannot integrate and interpret parental requests and motivation, but also because the parents often misinterpret the child's behavior as negativism or perverse willfulness.

Two Out-Patient Programs, Dependent on Diagnostic Evaluation, Were Undertaken on an Experimental Basis

☐ With the hypothesis that concept deficits are the primary disruptive factors in the development of many of the children evaluated, two out-patient treatment or training programs were recently undertaken on an experimental basis. In each treatment program, the goal is to facilitate the child's acquisition of organizing principles with which to comprehend and respond to his environment. Both are highly dependent upon the clinic's diagnostic evaluation, particularly the psychological assessment. In the psychologist's examination, the patient is seen over a period of one to two weeks for a total of five to ten hours. Special emphasis is placed on determining the level and nature of the concepts available to the child and the mode of learning which the child has already developed. In practice, this often becomes a series of short learning experiments in which the specificity of information given, the complexity of response required, and the level of conceptual integration needed for solution are systematically varied.

The Concept Formation Program

☐ In the first program, the Concept Formation Program, the goal is the development of concepts with children who are usually quite verbal but who demonstrate specific deficits and are often evaluated as aphasic and/or mildly or moderately retarded. This clinical research is being conducted by Lawrence Benjamin, Steven Mattis and Baylis Thomas, who are Project co-directors and clinic staff psychologists. The children are seen twice a week for one hour each session.

The initial problem for the worker in the Concept Formation Program is to analyze those concepts in which deficiencies were noted to determine their sensory-motor components. Problem-solving and discrimination tasks are then constructed so that this basic sensory-motor component is isolated and experienced by the child and the appropriate concomitant verbal label or verbalization is introduced. Gradually, tasks are presented in which the sensory-motor cues are diminished and the verbalization is accentuated until problems are solved using only the verbal components. For example, if the concept "shape" has not as yet developed, one might begin by presenting spherical objects differing in size, material, and weight and introduce the term "round." After some practice, a new term "square" might be experienced in a similar manner. After two or three specific shapes have been learned, discrimination problems are presented. Up until this point, merely pointing to the correct object or labeling a specific shape is required. However, once discrimination between shapes has been demonstrated, one can then proceed to tasks requiring the child to verbalize similarities and differences in shape. Thus, when given several objects, all square but differing in size, texture, etc., the child is asked, "How are all these the same?" He gradually proceeds from statements like, "This is a square, and this is a square," etc. to "They're all the same 'shape.' "

A more difficult variation of the problem is to present several objects which differ along every other continuum, except that three are round and one is square. In this task, the question is asked, "Which one doesn't belong and why?" The child must then check to see that the abstraction or hypothesis holds for three of the items but not for a fourth. The solution of such a task requires not only deductive and inductive reasoning, but also the processes of inclusive and eliminative thinking, that is, the formal testing of an hypothesis.

How are a Button, a Penny, and a Wheel Alike?

☐ During this phase of the training, other concepts either previously learned or newly taught are worked into the problems so that the child must evoke the most appropriate concept from among several likely hypotheses and correctly discard this same concept as inappropriate in other tasks. As the child gains familiarity with the training stimuli and their names, it becomes possible to present items verbally without their being physically present. For example, one might ask, "How are a button, a penny, and a wheel alike?"

A good test of whether or not a verbalization is truly a concept or a symbol, as contrasted with a sign or sample association, is to introduce items verbally with which the child has had previous experience but which were not training objects. In the Concept Formation Program, we have developed such criteria tests, and they are given to the child before and after training. In addition, periodic interviews with the parents and the child are scheduled, and school reports are obtained. With these data, we plan to test our working hypothesis that the acquisition of specific concepts is transferable to other situations and allows the child to cope with previously disruptive events.

The Day Treatment Program

☐ The second approach, the Day Treatment Program, is directed by Steven Mattis, Ph.D. This unit serves children who are often viewed as autistic, schizophrenic and/or profoundly retarded. The children demonstrate little or no receptive or expressive language and few self-care skills. They are referred to the program through the clinic after a diagnostic case conference. Structural facilities include a sound-deadened Group Treatment Area, which contains over five hundred square feet of free space, three individual treatment cubicles at the perimeter of the larger space, a boys' and girls' bathroom, both directly accessible to the Group Treatment Area, and an observation-conference room from which professional personnel and parents can view the activities and sound-film recordings can be made.

At present we plan to have a minimum of four and a maximum of eight children. Each child attends daily, Monday through Friday, from 9:30 a.m. to 2:30 p.m. There is one staff member for every two children and one assistant for the group. The workers are supervised by the clinic psychologists. At present we have appointed two members to the program, each of whom has an M.A. in psychology with a concentration in learning theory and child development.

Major Goals of the Project

☐ This project has three major goals: (1) service, (2) research, and (3) demonstration of results. Although all professional personnel hold joint appointments in both the clinic and the project, the Day Treatment Program is viewed primarily as a service arm of the clinic. The children we will serve are rarely seen outside of a residential setting. However, we have interviewed a fairly large number of parents who, for many reasons, some quite reality-oriented and some quite pathological, have decided not to institutionalize their children at the present time. Therefore in addition to working with the children, an important aspect of the service is casework with parents.

The research goals cannot truly be separated from actual service, for, like all meaningful clinical research, the problems to be explored evolve from questions and contradictions observed in practice. If a satisfactory solution is found, it is re-introduced as soon as it is appropriate. What the researcher is in a position to do, however, is to maintain some distance so that the problems which arise are put into perspective in terms of past clinical experience and current theories of child, psychosexual, and cognitive development. The behavior of these children does not really conform adequately to any one theory; consequently, it provides an excellent opportunity to evolve new or amend existing frameworks.

We have found that sound-film recordings of our work are an effective method of demonstrating techniques we have developed and of disseminating information about such children. A room was therefore constructed which abuts both the Group Treatment Area and one of the individual treatment areas from which 16mm sound-film recordings can be made. These films will serve not only as clinical records, but also as a research tool for multiple observations. They can also be edited to serve as demonstration and training film for professional workers in the field.

It is Important to Determine the Best Sensory and Response Modalities

☐ While casework with parents, research, and demonstration procedures are being conducted intermittently during the course of the Day Treatment Program, the bulk of the work—that is, work with the children—will be in progress daily. The training and treatment programs are predicated, as in the Concept Formation Program, on a thorough diagnostic evaluation. In developing an individual treatment plan, it is important to determine those sensory and response modalities best developed by the child, as well as those available to him. We have found, for example, that a given child may perform more adequately when presented with an auditory cue and asked for a vocal response, than when presented with a tactual cue and asked for a motor response. Another child, equally devastated intellectually, will perform in exactly the opposite manner.

The goal in this program is to develop organizing principles, not at the level of concepts, but rather more simply as reliable responses to a wide range of environmental and internal cues. Whereas in the Concept Formation Program training might begin with tasks which require the perception of similarities in identical objects, in the Day Treatment Program this same level is viewed as a long-term goal. That is, if we can facilitate the recognition of object constancy or similarities in situations, and the communicative verbal labeling of such events, we will consider our program a success.

I think it would be presumptuous and probably grossly inaccurate to speak of a specific treatment program at this time. In general, what we plan to do is to present the child first with tasks requiring the sensory-response mode best developed in order to broaden his experience with a variety of stimuli. Gradually tasks will be introduced which require inter-sensory integration and multiple modes of response. As is apparent from the terminology used in referring to the Day Treatment Program, while the cues and responses selected are dependent upon the literature in child and cognitive development, the manner of presentation and task situations are derived from learning theories, primarily classified, instrumental, and operant conditioning.

The ultimate usefulness of both the Concept Formation and Day Treatment Programs is still to be determined. There will probably be a great deal of trial and error in bridging the gap between the implications of our diagnostic findings and the development of effective treatment modalities. However, the theoretical approach to the problems of visually impaired, multi-handicapped children presented today appears to be a promising alternative to existing frameworks.

NEXT MONTH: The February issue of *The New Outlook* will include articles on a proposed readiness test for mobility-training candidates; attitudes of children toward a blind brother or sister; and accreditation and the voluntary health movement. M. Robert Barnett adds an editorial note on "Old Rainbows That Never End."

Can A Blind Person Be A Successful Teacher?

EDWARD F. HUNTINGTON, Ed.D.

Dr. Huntington is Supervising Principal of the Canton Central School in Canton, New York

Although there has been considerable literature regarding the blind in the teaching profession, most school administrators remain uncertain as to the feasibility of using blind teachers. Often a blind applicant is rejected without an interview because the prospective employer cannot comprehend how a blind person can function in the classroom.

Convinced of the seriousness of this problem, the writer decided to pursue a doctoral study in this area. The study consisted of two phases: (1) a survey of chief school officers to identify their concerns over the employment of a blind teacher and (2) a study of the experiences, practices and problems in schools where blind teachers have been employed.

To survey chief school officers, a questionnaire was sent to 264 schools asking respondents to list the aspects of teaching which might be problem areas for the blind. The questionnaire also requested information as to teaching areas considered most and least feasible for the blind and respondents were asked to indicate what positive effects they thought blindness would have in a teaching situation.

In the second phase of the study, personal interviews were conducted at eight New York State schools where blind teachers had been employed. Also, information was collected by questionnaire from twenty-four schools in California, where blind teachers were employed in 1964-65.

Administrators Indicate Areas of Potential Problems

☐ Of 243 valid replies from chief school officers, over one-half indicated that respondents thought the following to be potential problems areas for blind teachers: (1) Lunchroom Supervision; (2) Administering Tests; (3) Study Hall Supervision; (4) Chaperoning Student Activities; (5) Use of Visual Aids; (6) Fire Drills; (7) Keeping Written Records; (8) Discipline.

In analyzing the results, an attempt was made to identify a particular group of administrators who were either more or less concerned about the problems of employing a blind teacher. Administrators were categorized in four ways: (1) by type of district (rural, urban, suburban and village); (2) by district enrollment; (3) by socio-economic level of the majority of the residents in the district; and (4) by the administrator's familiarity with the blind. Statistical tests revealed no significant differences in the responses of administrators when categorized in the various groups.

In the second phase of the study, questions were aimed at discovering what types of problems had actually been experienced by blind teachers and what measures had been taken to alleviate such problems. Administrators, teachers and students were interviewed in New York State schools, while building principals completed the questionnaire sent to California schools.

In nearly every case, lunchroom supervision was not assigned to blind teachers. The consensus was that the blind teacher could be assigned other extra-class duties more appropriate to his capabilities. In only seven of the thirty-two schools was cheating on tests listed as a problem. To minimize this problem, alternate forms of tests were often used. On major tests, other proctors were occasionally assigned. One teacher switched with a study hall teacher during examinations. In another school, honor students helped proctor.

The assignment of blind teachers to study halls was a practice in about half of the schools. In all cases, the assignment was adequately completed, although in one school, there had been excessive writing on study hall desks.

Blind teachers have chaperoned some types of student activities, usually based on the abilities and interest of the teacher. Two teachers were student council advisors, another sponsored a discussion club and others volunteered to chaperon games and dances. In most instances, a sighted chaperon also attended the function.

Although most of the blind teachers were described as capable of operating audio-visual equipment, many reported that student assistants were often utilized for this purpose. (This practice is also common with sighted teachers.)

Blind teachers have had no difficulty conducting fire drills. In all of the schools, a procedure had been developed to ensure prompt and efficient evacuation of children in the event of an emergency. School administrators indicated that they had no more concern over the safety of the children in the blind teacher's room than those in classes of sighted teachers.

A number of methods of keeping written records were discovered in the study. The most common was the use of braille and a later transferral of information by typewriter. Several teachers employed a sighted aide to perform clerical duties such as marking papers, recording grades and attendance, etc. In one instance, a tape recorder was used to record information which later could be transcribed by the blind teacher or an aide.

Respect, not Blindness, a Key Factor in Discipline

☐ Undoubtedly, the most controversial topic regarding the use of blind teachers is discipline. The survey of chief school officers revealed that many administrators feel that blindness would lead to excessive discipline problems. In actual practice, it was discovered, however, that blindness is not a major factor in discipline. Instead, the key factor was identified as the respect commanded by a teacher. Principals in schools where the blind have been employed reported that students tended to forget about the teacher's lack of vision after the first few months of teaching. Of the thirty-two blind teachers in the study, only five were reported to have less than average discipline in their classroom.

Pupil Personnel Services: Background, Roles, and Trends

JOHN K. FISHER, Ed.D.

Dr. Fisher is an associate professor with the Department of Educational Services in the College of Education at The Pennsylvania State University

GORDON P. LIDDLE, Ph.D.

Dr. Liddle is general director of the Interprofessional Research Commission on Pupil Personnel Services at the University of Maryland

Pupil personnel services are usually defined as services provided in schools by attendance coordinators, counselors, health personnel, psychiatrists, psychologists, social workers, and speech and hearing specialists. The services are primarily aimed at alleviation of learning difficulties. They are conducted for all children: sighted, blind, normal, and exceptional. Ordinarily, personnel services are auxiliary to instructional services provided by teachers.

Any partially sighted or blind child may have needs that are different from those of other children, and pupil services specialists, by virtue of training and special skills, can assist instructional personnel in identifying these different needs and planning activities that will help to meet them.

Use of pupil services specialists in schools is by no means a recent development. The origin of most of these services can be traced back to the beginning of this century; the vocational guidance movement, predecessor of school counseling, was initiated by Frank Parsons in the early 1900's. School health services, beginning with a concern that sick pupils not infect the well, can also be traced back to this period. Attendance service dates back to early attendance laws responsible for keeping children in school. School psychology began with Alfred Binet and others who inspired the testing movement. During this time, too, social workers appeared in schools in Boston, New York City, and Hartford, Connecticut. This service was seen as a means of preventing delinquency through working with the home, school, and community. Speech and hearing specialists are a much more recent addition to the pupil services group.

The early motivation for these various pupil services specialists was to remedy a specific condition that was thought undesirable as it related to school children. Such services were largely "crisis" oriented and remedial in nature.

Growth of these services was relatively slow until after World War II when much impetus for their development was provided by the National Defense Education Act, which allowed funds for upgrading school counseling. As is often the case, growth in one pupil services discipline (counseling) stimulated expansion of other services. In fact, a recent national study conducted by the Interprofessional Research Commission on Pupil Personnel Services indicates that the following percentages of secondary schools now have these services: 91%, guidance; 83%, nursing; 69%, attendance; 58%, psychology; 58%, speech and hearing; 45%, social work; and 44%, physicians'.

Concomitant with growth in the number of pupil services specialists in schools has been the development of a person to coordinate their efforts. Before 1950 the title "Director of Pupil Personnel Services" was almost unknown in most school districts. At present there are approximately ten times as many such persons as there were in 1950. New York State, where the number of directors increased from 12 in 1950 to 189 by 1965, provides an excellent illustration of this growth. The qualifications of these people are high. A recent study of directors of pupil personnel services, conducted by the Interprofessional Research Commission on Pupil Personnel Services, revealed that on the average directors have been in education for twenty years, have had six years of teaching experience, five years as a pupil services worker, and nine years in central office administration. Thirty percent of the directors hold doctoral degrees, and ninety percent of the remainder have more than ten graduate hours beyond the master's degree. In the future, more school systems will employ such persons with even higher qualifications.

Pupil services workers perform a wide variety of functions and, to a certain extent, their work overlaps. However, there is considerable agreement on some of their functions.

Counselors Match Interest and Abilities to Needs of Business and Industry

☐ School counselors are the most numerous of pupil services workers. They are responsible for individual and group counseling of students relative to educational and vocational concerns, as well as some kinds of personal counseling. Usually, counselors are the people in school to whom students and teachers turn for information concerning occupations, college, and other kinds of post-high school training. They are also familiar with standardized tests of intelligence, achievement, aptitude, interest, and personality, and they are able to administer and interpret scores on these measures to students, teachers, and parents. In addition, they are often called upon to serve as resource persons to rather diverse groups. They attempt to match the interests and abilities of students with the needs of business and industry. Thus, counselors are the pupil services workers most likely to be seen by students during school careers. They provide counseling, consultant, and information services.

School psychologists spend a large proportion of time on psychological case studies of students referred to them. Ordinarily they work with children who exhibit behavior maladjustment or who are not achieving satisfactorily. Psychologists gather information about children through psychological tests and interviews, enabling them to recommend courses of action that can be followed to help the children. They later conduct follow-up investigations to determine the effectiveness of diagnostic studies and treatment programs. Some psychologists may have major responsibility for group testing programs, while others work with teachers in mental health and intellectual functioning. Their understanding of measuring instruments and techniques, human growth and development, and the learning process enables them to act as consultants to teachers and others. School psychologists also help to identify children for placement in special classes. They must be skillful in adapting instruments and techniques to children with various types of physical handicaps. Some members of this group conduct research which helps provide information about the effectiveness of programs, methods, or techniques in education.

Social Workers Provide Two-Way Communication in the School

☐ The school social worker's major contribution arises from specialized knowledge of casework techniques and ability to work with people in the school, home, and community. He receives referrals from the school staff concerning children who are exhibiting behavior that interferes with their learning, attendance, or adjustment. The social worker then uses casework skills and knowledge of community resources in helping these children. He interviews the child and/or his parents, and with the help of gathered data plus a knowledge of the child's personality, previous history, and learning capacities, the social worker assists the child in making a better adjustment to school. Parents are given an increased understanding of the school and its expectations. In turn, school personnel are made aware of parents' and children's reactions to school personnel and policies. Thus, the social worker provides a two-way flow of communication. Often the child's behavior is a reflection of some family problem, and where this is the case, the social worker aids the family through contact with appropriate community agencies or organizations.

School health services comprise the contributions made by physicians, nurses, dental personnel, and other such specialists. Nurses are the most numerous of these specialists and are present in over 80 percent of schools. Normally, they have responsibility for screening children for physical defects; they also provide emergency care, serve as resource persons on health instruction, and attempt to foster positive health attitudes and practices in the school. Nurses serve on school health committees and have responsibility for the health records of individual children. Physicians work with nurses in developing and participating in immunization programs, performing medical examinations of children, coordinating health services, and preventing disease. A large proportion of schools (approximately 65 percent) provide some dental services for children. The school dentist or oral hygienist examines children, and when treatment is needed, referral is made to the family dentist or the proper community agency.

Attendance service, the oldest of the pupil services, has as its major purpose the promotion of regular attendance. The early attendance officers, operating in authoritarian fashion, placed much emphasis on forcing children to attend school regularly. Today, realizing that non-attendance is symptomatic of some problem, they function more broadly. In addition to enforcing compulsory attendance laws, they maintain school census, enrollment, and attendance records, and study factors related to and affecting attendance. They work with school staff, parents, other pupil services personnel, and community groups in attempting to recognize the nature of problems in this area and to make attempts to solve them.

Many school districts employ speech therapists to work with children who have defective speech. The therapist organizes a speech correction program, examines and diagnoses cases, and gives speech therapy. She works with school personnel in assisting children with minor speech or hearing defects.

Many such persons have been trained in audiometry. In this capacity, they are mainly utilized to identify and diagnose hearing loss or deafness.

Emergence of the Preventive Concept

☐ Pupil personnel services largely began with a crisis orientation and continued to operate in this fashion until recently. For example, much of the secondary school counselor's time is spent in attempting to cope with problem students and their parents, doing clerical work and record-keeping, and advising college-bound students. Several studies have shown that a small proportion of his time is spent in counseling or working with the general student population. This has been much the case in other pupil services disciplines where most drastic problems were tackled first and less serious ones had to be postponed. This is in no way a reflection upon the skills or competencies of pupil services personnel. This way of operation came about through lack of trained personnel and limitations on their time. The serious problems, being most visible, were assigned a lion's share of the specialists' time. Thus, for the most part, college-bound pupils or those who had serious behavior problems were the only ones who had meaningful contact with pupil services specialists. Pupils with less obvious problems had relatively little contact with pupil services specialists.

Within the past ten years a newer concept of pupil services has emerged—the preventive concept. There has been a realization that even if graduate schools were greatly expanded and more people were attracted to the field there would never be sufficient specialists to work with pupils successfully on a one-to-one basis. If present trends continue, such suggested maximums of three hundred students per counselor cannot hope to be met. Even if they could be, a counselor cannot possibly know well and work with that many individuals. This also holds true for the other pupil services specialists. Thus, it appears that there will never be enough specialists to work with all students—the handicapped, the normal, and the gifted—individually.

Under the newer concept of pupil services, specialists will not only be working with pupils but also with teachers and parents in more depth than in the past. It is thought that if the "significant others" in a child's environment could be influenced, this will ultimately have a greater influence upon the child than working with him in minimal fashion.

A reflection of this trend is evident in the work at the University of Texas Regional Center of the Interprofessional Research Commission on Pupil Personnel Services. Mental health consultants, called child behavior consultants (CBC's), rather than providing direct services to children, attempt to help teachers become more skilled observers of students and to better understand their own roles in assisting students. Jointly the teacher and the CBC arrive at a tentative diagnosis and treatment plan. Together they analyze effects of the treatment, and modifications are made as needed. Use of this consultant does not eliminate the need for psychological testing, home visits, and other services, but it does help the teacher to work more effectively with students. Tentative findings from this project indicate that teachers believe the consultant has been most helpful to them in identifying the problems of children, understanding these problems, confirming the teachers' judgments, and giving them additional information or knowledge relating to human behavior and emotions.

Another center of the Interprofessional Research Commission on Pupil Personnel Services, at Chico State College in California, has been training pupil services specialists to help groups of parents and teachers understand the learning and emotional problems of school children. Group sessions are held before and after school under the guidance of trained personnel.

Use of a Generalist Backed by Highly Competent Specialists

□ There has been a tendency toward more openness in thinking with regard to the performance of pupil services functions. Many leaders in this field are expressing a willingness to study roles performed by specialists and consider the possibility that some could be performed by persons with lesser academic training or by other pupil services specialists. With this openness has come a willingness in some quarters to experiment. The University of Maryland center of the Interprofessional Research Commission on Pupil Personnel Services is attempting to determine if a generalist can be trained, largely on the job, to perform the functions of the elementary school counselor plus several functions of school psychologists, social workers, and nurses. This generalist has been called a Child Development Consultant or CDC. He attempts to do what needs to be done of a pupil services nature in the single school that he serves. When he needs the assistance of system-wide specialists in school psychology, social work, or health services he is free to call upon them. It is anticipated that this worker can handle most school needs for pupil services, if backed by highly competent specialists. The effectiveness of this person is being compared with that of a counselor and a social worker working full-time in one elementary school each.

Under the newer preventive concept of pupil services, greater efforts will be mounted earlier in children's school careers to forestall problems or to remedy them before they become serious. This is already shown by the presence of a larger number and variety of pupil services specialists at the elementary school level. A recent national survey conducted by the Interprofessional Research Commission on Pupil Personnel Services indicates the following percentages of services in elmentary schools: 89%, nursing; 77%, speech and/or hearing; 65%, psychological; 53%, attendance; 45%, social work; 32%, guidance.

Such large numbers of specialists were unheard of a few years ago, but a trend is evident even in legislation currently before Congress. House Bill 11322 proposes that the Federal Government sponsor training and employment of thousands of "child development specialists" (CDC's) for the first three grades of elementary school. These specialists would work with community agencies, teachers, parents, and pupils; they would assist school personnel in coping with learning and behavior problems of children, would help recognize potentially serious problems, and would assist school staff and parents to know more about the community and its resources. If this bill is passed, it will have a major impact on pupil services in the elementary school. These specialists may in time move into the upper grades of elementary and secondary school.

It is, however, doubtful that pupil services specialists, as we now know them, will disappear. Quite the contrary, we may have generalists (CBC's) and specialists (counselors, nurses, psychologists, etc.) all operating together as a team to prevent problems, or to alleviate them, as they become evident. It is highly likely that in the future all pupil services specialists will spend more time with parents, teachers, and one another than in the past.

Disability Insurance Benefits For The Blind

Under recent interpretations of 1965 amendments to the Social Security Act, an individual who incurred blindness between the ages of twenty-one and thirty-one can qualify for disability insurance benefits with half the elapsed quarters in work covered by social security and a minimum of six quarters of coverage if he is under twenty-four. The person need not be under thirty-one when he applies for benefits, provided he is not engaged in substantial gainful activity. Inability to engage in substantial gainful activity generally means annual earnings of less than $1500, but other factors are also considered.

The definition of blindness used is central visual acuity of 5/200 in the better eye with best correction or contraction of visual field to five degrees or less in the better eye.

Ordinarily an individual must have twenty out of the forty quarters preceding onset of disability to qualify for cash benefits, if he is unable to engage in substantial gainful activities because of a disabling condition which will lead to death or can be expected to last twelve months.

A change made by the same 1965 amendments enables blind individuals between the ages of fifty-five and sixty-five to qualify for benefits for any month in which they do not engage in substantial gainful activity in an occupation identical or similar to the job they are qualified to hold by training and experience. Thus a blind person in this age group may receive cash benefits even if he has demonstrated he can work in another job, as long as he is not considered to be engaged in substantial gainful activity.

It should be noted that veterans of service in the armed forces between September 1940 and December 1956 received social security coverage for their military service as if they had earnings of $160 a month. Thus a veteran blinded between the ages of twenty-one and twenty-four who had a year and a half of military service, including hospitalization, may qualify for disability insurance regardless of his present age, if he is not able to engage in substantial gainful activity. Military service credits for social security coverage may also be used in calculating the twenty quarters of covered employment needed for cash benefits after age thirty-one.

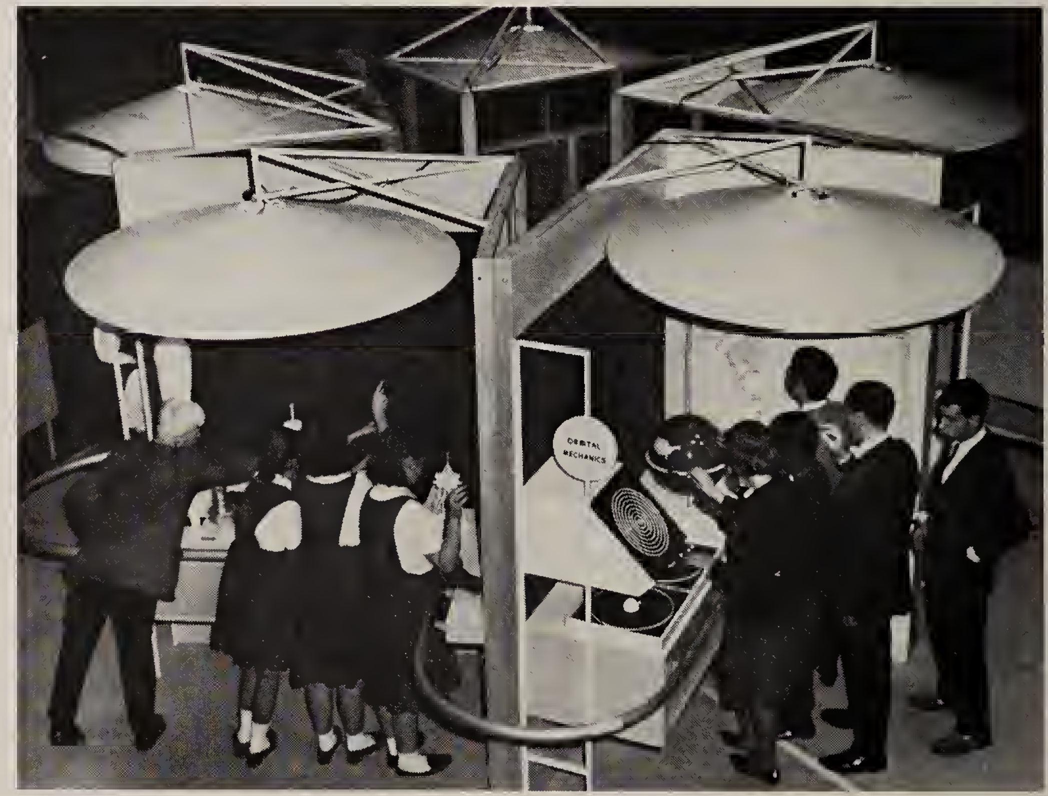
NASA Exhibit Starts National Tour

An exhibit on manned flight and space exploration created for blind persons opened its national tour at the New York Association for the Blind. The exhibit, built by the National Aeronautics and Space Administration, uses recordings and scale models to describe flight in the United States since the days of Wilbur and Orville Wright.

The exhibit is currently showing at the Metropolitan Society for the Blind in Detroit. Further information can be obtained from Maurice A. Peter, NASA Headquarters, Code F.G.E., Washington, D.C. 20546.

Top: *The exhibit is star shaped. Here, students from the Lavelle School begin a tour*

Right: *Visitors follow an aluminum rail leading through Orbital Mechanics and Scientific Satellites*



Top Left: *Tape-recorded narration from speaker outlines space capsules, space suits, and lunar excursion*

Bottom Left: *Six-foot model of Saturn C-5 launch vehicle is one of several with moveable parts*

Above: *In the Aeronautical Research area, two students examine an X-15 rocket plane*

Training of Non-Clinical Professionals in Group Therapy Techniques

AL MANASTER

Staff Psychologist

JUDITH PILLAR

Staff Psychologist

ALICE DRELL

Director of Social Service

DOROTHY DYKEMA

Rehabilitation Counselor

The authors are on the staff of the Illinois Visually Handicapped Institute in Chicago

As part of the rehabilitation program at the Illinois Visually Handicapped Institute, each year a summer mobility course is held for blind youngsters, ages eleven through seventeen. During 1966 a full six weeks was set aside exclusively for this course.

An integral part of the course plan was intensive participation by the clinical services staff in a program of group therapy and individual counseling (as needed) for the thirty-eight children attending, with group discussion sessions also scheduled for the parents. A total of eleven separate groups was proposed (five of children and six of parents), meeting once a week.

It was quite evident that the clinical services staff would be unable to handle these groups without help. It would be next to impossible for four persons to be therapists for all groups and still carry on their regular staff duties. At IVHI, we have used the concept of co-therapists in any group setting, finding this to be most effective for our purposes.

After discussion with the administration, it was decided to ask the non-clinical services (teaching) staff for volunteers who would be interested in training to become co-therapists of the groups. We felt this would alleviate the problem of manpower and also aid greatly in staff development and integration. We hoped that several benefits might accrue: a deeper understanding and acceptance of the student and his reactions; an enhancement of liaison and interaction between the clinical services and teaching staff, thus developing more of a team approach; and an overall aid in growth and staff development as well as improvement in the services that the Institute could offer.

Our problem was how to train and prepare our non-clinical professionals (in this case meaning non-psychologists or social workers) in the short time available (approximately four weeks). We were starting with some important factors in our favor. We had the total support and cooperation of the administration; the teachers we were to work with had some experience with groups in classroom situations although not of a counseling, group-centered nature; and all had a minimum of college level education (a B.A. in education) and probably an above average intellectual level. Thus, they did have the capacity and tools needed to comprehend and rapidly integrate many of the psychological concepts offered. Also, as persons already working with the blind and as volunteers for this program we knew there was some personal commitment and involvement.

The volunteers taking part were three IVHI staff members and four graduate students from Western Michigan University who were completing their training programs leading to an M.A. and working as teachers of the blind. Of the trained non-clinical professionals, five were themselves visually handicapped.

Our training basically followed the methods suggested by Reiff and Riessman.[8] Since we were working with a group that had a good experiential and educational base, we added several assigned psychological and technical references to offer additional ideas about technique, background, dynamics and theories.[1,2,4,6,9]

Selection of Co-Therapists Through a Rather Natural Process

☐ We decided to have at least three intensive T group sessions. We started by announcing at the staff meeting that we were seeking co-therapists. We then held one open session for the entire staff at which we played various group psychotherapy tapes from other rehabilitation centers and discussed the ideas and processes involved. A training outline developed for our use was handed out to the entire staff.[5] After this session we asked for volunteers to attend initial training sessions. We felt that, as we went along, those persons who did not fit in with our needs or did not seem to have the qualities we felt were important would be so advised and not included in the training. A rather natural process of selection seemed to work out.

About ten persons came to the first training session (exclusive of the clinical services staff). This session was more of a general and didactic nature. An attempt was made to show the processes involved in groups. One way this was done (as suggested by Reiff and Riessman) was through "building a strong group solidarity among the non-professional team." The trainer verbally attacked one member of the clinical services team and, through this attack, brought the rest of the group together to defend the member. There then was a discussion of the situation, the processes involved, and the feelings aroused by the interaction. Various readings were assigned during this first session.

In the second session (attended by the seven who remained in the program) certain set roles as adult students were played with each trainee working with one of the members of clinical services as co-therapists, using the rest of the training group as the therapy group. Various statements were made which each person interpreted as to feelings involved. There were some didactics involved in this second group although to a much lesser degree. In the third session, roles were again played with the trainees acting as parents of blind children. Responsibility as co-therapist rotated through the group.

Each training session ran approximately four hours in length and emphasis was, for the most part, on doing, i.e., participation rather than a lecture approach. The major goal in these sessions was toward a sensitivity type of training: to listen to what was being said, not the words, but the thoughts and the feelings. The concern was more on techniques, on the "how" and "doing," rather than on underlying personality dynamics and theories.

In a recent paper, MacLennan discusses some difficulties that seem common to most of the programs dealing with training and involvement of nonpsychologists to aid or do psychological counseling (group or individual).[5] We attacked these problems in various ways.

Our basic premise was what was laid down in the report of the Joint Commission on Mental Illness and Health:

> That non-medical mental health workers with aptitude, sound training, practical experience, and demonstrable competence should be permitted to do general, short term psychotherapy—namely, treating persons by objective, permissive, non-directive techniques of listening to their troubles and helping them resolve these troubles in an individually insightful and socially useful way.[3] (p. 249)

> The principle that must guide us in questions of authority, professional prerogatives, and qualifications involved in treatment of the mentally ill is one of individual competence. . . .[3] (p. 248)

Working on this basis, we used several methods to integrate and solidify the image of our co-therapists as having equal reponsibility and status and as truly being a member of clinical services rehabilitation team.

Part of our method was, from the beginning, speaking of the trainees as being co-therapists in a group setting, but not as senior-junior therapists.

There were numerous conferences throughout the six-week program (which has been continued in the regular adult session) during which there had been an interaction, discussion, and exchange of what had been going on in the group. The comments of the new co-therapists have been as eagerly sought and as useful as those of the regular members of clinical services staff.

The new co-therapists were placed into the groups immediately. We felt that by this action we showed them we were not afraid to give them an opportunity to make use of their skills and capabilities.

In the regular IVHI staffings, when a report was requested from the clinical services staff rather than one of the psychologists or social workers making the report, one of the teacher-co-therapists would speak up. This was then backed up by additional discussion by others on the clinical services team.

Increased Identification with Clinical Services

☐ Prior to the initiation of this program, there existed a marked dichotomy in the agency's perception of its clients and their needs. That is, the teacher's role in the rehabilitation process was limited primarily to the classroom setting, often restricting his relationship to the client to that of teacher-student. If a student presented behavioral problems he was referred to the clinical services area so that a "cure" might be attempted. Unfortunately, this attitude developed in a setting attempting to promote a true team approach and therapeutic community. From the increased understanding of and involvement in the therapeutic process, the entire professional staff has made long strides in the direction of integration of its perception of clients and of the rehabilitation process generally. A striking example of this movement has been the increased exchange of feelings and ideas focusing on the person who happens to be the subject of a staff conference. This was facilitated by teacher-co-therapists contributing to staff meetings. In this way, there was an increased identification on the part of the overall staff and on the part of the individual non-clinical professional with the clinical services area.

However, this increased identification brought to light a hitherto ignored problem. The dual role of teacher-co-therapist presented certain inherent conflicts—disciplinarian versus permissive listener; role confusion on the part of group members as well as therapists; supervisory responsibility. Although no simple resolution of such conflicts can be offered, it has been our experience that, as the new co-therapist gains in role security, this is reflected in his ability to resolve such conflicts for himself.

Since this entire training program was conducted under intense time pressure, it can be stated that more group sessions would have been valuable. An increase in the number of training sessions would probably have resulted in greater confidence in the fledgling co-therapists. Because of their limited exposure to the techniques involved, there was a tendency for trainees to be quite reticent during the first several sessions. Greater emphasis on role playing as a means of experiencing the group process would probably have reduced a good part of this anxiety. The other area where the time factor took a toll was supervision. Closer and more frequent supervision and the listening and discussion of tape recordings by the co-therapists following each session would also have alleviated much anxiety. In addition, other techniques for training might have been introduced, e.g., psychodrama. It has since been our experience that the recognition of these flaws and possibilities for improvement were, in and of themselves, an aid in improving the activities of the new co-therapists and we have developed an ongoing program incorporating many of these and other methods of sensitivity training.

We feel there are several important implications in our experiences for other agencies.

An Untapped Source of Manpower Within the Institution

☐ The majority of the emphasis on training of the non-professional has been on the so-called indigenous persons, often interpreted as those at the lower socio-economic-educational levels. While commendable and important, this overlooks a valuable untapped source of manpower—the non-psychological (or social service) professional within the agency or institution. These persons often have the educational and experiential levels plus the interest and motivation to enable them to make effective use of an intensive, short, training program.

In this institution, we work with people who are basically adequate, normal or healthy persons in stress-crisis situations due to a disability. What is needed by these persons is a form of stress or crisis interaction counseling to help them work through immediate problems. Yet in most hospitals, rehabilitation settings, nursing or convalescent homes, and schools, it is precisely these people who, due to a lack of psychologists or social workers, are least likely to find someone who understands. It is not until reactions to the stress or crisis situation become pronounced and disruptive that help is offered. With sensitivity training, perhaps modeled on our experience, the non-clinical professional (nurse, M.C., teacher, O.T., volunteer visitor) could take more effective steps in helping the person left to his own, often meager, resources.

One more implication that we feel is often overlooked is that the type of experience and training we offered and the resulting interaction have greatly aided our trainees in better performance in their own area. They felt that not only had they learned new skills but they had become better teachers, developing new outlooks and feelings for their teaching areas and students. We wonder what the effects of this form of sensitivity group interaction would have on teachers in our schools and on the educational system in general. For that matter, the effects may be beneficial in any facility, public or private, in which there is a dependence or emphasis on close interaction between people with varying needs, strengths and potentials.

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Stipends for Teachers, Summer 1967

Stipends of $200 each will be made available by the American Foundation for the Blind to qualified educators of blind and visually-handicapped children who enroll in certain summer courses and workshops during the summer of 1967.

Applicants must be administrators, supervisors, or teachers who will be employed full-time in educational programs for blind and visually handicapped students for the 1967-68 academic year. The deadline for receipt of completed applications is May 1, 1967. For further information and application form, write to:

Mr. Huesten Collingwood, Director
Personnel and Training Service
American Foundation for the Blind
15 West 16th Street
New York, New York 10011

Work and Motivation of the Difficult Blind Client

JOHN F. MULDOON, Ph.D., M.P.H.

Dr. Muldoon is executive director of the Craig House-Technoma Workshop in Pittsburgh, Pa.

At some time a majority of men and four out of five women are part of the work force. However, we in rehabilitation work are aware that a substantial number of citizens avoid being part of the work force. Rather than accept the comfort of the pessimistic point of view that some clients just never will make a job commitment, most rehabilitation workers urge the resistant client onward, perhaps while quietly wondering what must be done to get him moving steadily toward responsible employment.

As a first step toward understanding the behavior of the difficult blind client, consider some aspects of the process by which a disabled client finds his way into the labor force. Counseling and placement involve a number of people, the interactions among them, and the employment situation at a given time. In the case of some disabled persons, the contribution of a counselor may be minimal, and the employment situation may be of no great importance; some clients avoid counseling, and in spite of obstacles, find satisfactory employment. Such clients pose few problems for the rehabilitation specialist. They merge into the community and are often lost to rehabilitation statistics. They become to their fellow workers, not the blind man who works as an insurance agent, but the insurance agent who happens to be blind.

The clients who form the greater part of our caseloads are challenges because they *do* need our help. Their successful employment depends on our relationship with them and the availability of a large variety of job opportunities. Success in their placement results from the fruitful interaction of the assets of client and counselor. Conversely, failure in placement can be viewed as a result of the interaction of the shortcomings of both counselor and client.

In this analysis we will consider three components to the problem: the client, the counselor, and the interaction of the two. First, let us discuss the client. Since anyone who works usually expects to receive benefit from his work, we will begin by examining the advantages of work and external factors which interfere with these advantages. We will then conclude the discussion of the client with an analysis of his internal or psychological obstacles which may interfere with his deriving adequate satisfaction from work.

Let us begin with the question "Why will man work?" This question has been asked for centuries and has been answered in many ways. In a recent book, Vroom (1964) reviews various aspects of motivation and work. I will review some of these and attempt to point out their relevance to understand-

This paper was presented to a 1965 training symposium for the professional staff of the Pennsylvania Office of the Blind.

ing why some men don't work. There are at least five reasons why most do:

1. Work provides wages to the individual in return for his services.
2. Work provides opportunities for the expenditure of mental or physical energy.
3. Work allows the individual to contribute to the production of goods and services.
4. Work permits or requires social interaction with other persons.
5. Work defines, at least in part, the social status of the role occupant.

Considerations of the Reasons Why People Work

☐ Let us consider the first reason: money, one indisputable reason for working. Although people disagree about the importance of wages, all agree that it is an important factor in why persons train themselves, and seek and continue work. The funds provided by wages not only enable a person to provide himself and his family with the means of survival, but also serve as an indicator of social status.

Although such an economic factor undoubtedly plays an important part in the decision to work, and to persevere at it, it is highly improbable that funds are the only inducements. I would assume this from the results of a study conducted by Morse and Weiss (1955) in which they asked the following question of over four hundred individuals: "If by some chance, you inherited enough money to live comfortably without working, do you think that you would work anyway or not?" Eighty percent of those questioned said that they would keep on working. The study also seems to suggest that the status provided by the job is an important variable in influencing the individual's attitudes toward work. Obviously, the wages received and the status of the occupation are closely related. If highly paid workers in high status occupations show greater interest in work, we may come to a tentative conclusion that if we can place clients in well-paying jobs that are meaningful to their own values and status needs, there is a great chance that they will continue to work.

Now, for the second reason why people work—work provides for expenditure of energy in the form of physical activity, mental activity, or both. There is evidence that for both physiological and psychological reasons, inactivity is a torment to a healthy human being. Morse and Weiss (1963) found that 37 percent of those persons who would continue to work when it was no longer a financial necessity gave negative reasons, such as without work they would be lost, bored, go crazy, or get into trouble. People seem to take some satisfaction in setting goals for themselves and striving to achieve them. There is some evidence that we tend to value not only the achievement but the energy expended in reaching a goal. Indeed, if something is achieved after a particularly strenuous endeavor, we tend to think more highly of it.

There are, however, some affective states in individuals which seem to be oriented toward suppressing all activity. For example, the depressed person is generally characterized by a lack of interest in setting and achieving goals for himself. Insofar as depression is a prevalent condition among blind persons, the value of work as an opportunity for expenditure of energy may not be as important to them as we would consider desirable.

Consider the third reason why people work—work allows the individual to contribute. The energy released in working is usually expended in the production of goods and services. A person normally takes satisfaction not only in working but also in seeing his accomplishments. Workers can also take satisfaction in the fact that the product of their endeavors is useful to others. Insofar as a person is able to accept himself as part of a group and recognize his responsibility for the well-being of others, the perception of himself as an individual who provides useful products is a source of satisfaction and this satisfaction in himself is a bond between him and the work world.

The Exceptional Person May Develop Self-Centeredness and Disinterest

☐ Some characteristics of blind persons, however, may make it difficult for them to derive satisfaction from an awareness of themselves as a part of society. Jacobson (1959) in an interesting paper, pointed out the difficulty a person has in developing an adequate conscience when he feels that he is not like the rest of us. When an individual begins to feel exceptional, whether because of a particular physical handicap or an unusual talent, he sets himself above the usual expectations and tends to develop an unusual self-centeredness and corresponding disinterest in the well-being of others. Hence, the experiences and attitudes which are of important motivational consequences for the average individual may not be present, at least temporarily, in some blind clients.

Social interaction, the fourth reason why people work, is an important part of employment. Work roles, particularly when the individual has some choice in determining his work and area of employment, provide specific kinds of socially important interactions. For some, work provides an opportunity to have influence over others; for some, it is an opportunity to be liked and popular; for others, an opportunity to be cared for and given directions. From this, we can imply that to the extent that an individual has little choice in determining his occupation or area of employment, the value of social interaction as a motivator will be reduced. Applying this to the field of counseling and placement of the blind client, we recognize immediately that we, as counselors, and our clients, as potential employees, usually have access to a limited number of occupations and an extraordinarily low number of potential employers, so that placement is often guided more by the availability of work of any kind than by the work-needs of the client.

The fifth reason why people work has to do with the status one gets from work. A person employed as a physician enjoys a high status, while a beggar carries a low one. We would expect motivation to be higher in the individual with higher status.

All of these considerations of why people work touch job content. Indeed, Vroom (1962) believes that job content is one of the most important determinants of job satisfaction and work motivation. Of course, the job content which is satisfying to one worker may not be satisfying to another, and it is difficult to say in advance how workers will react to a specific job. This depends on the interests and training of the worker. Ideally, the counselor tries to bring together meaningful job content and workers with interests and training required by the job. Sensitive and successful placement requires that the counselor help the worker find a position in which his interests and talents will allow him to perfrom well and experience the satisfaction of achievement. A person functions best if he can choose work which he believes is in keeping with his talents and values.

Vocational Development as Implementation of a Self-Concept

☐ This brings us to the topic of vocational choice, which is the process by which an individual chooses to seek training and employment in a specific occupation. It is a developmental experience by which the talents, interests, unique motivational system, and the values of a person find a natural and rewarding expression. Super (1957) has outlined a theory of vocational choice that has been well received by the counseling profession. He states that the "process of vocational development is essentially that of developing and implementing a self-concept; it is a compromise process in which the self-concept is a product of interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role-playing meet with the approval of superiors and fellows."

To adapt this theory to the blind client, we must consider not only the psychological impact of blindness on the self-concept of an individual, but also the impact of his experiences as a blind person on his self-concept. In the case of the adult who becomes blind and whose self-concept is fairly stable, his adaptation to blindness, although painful, should make it possible for him to continue reasonable expectations of himself and to expect others will treat him in an appropriate manner. However, if blindness isolates him, or confines him to the company of the blind, away from the commerce of his earlier associates, and if blindness guides him to work experiences not simply appropriate for the blind but for which blindness is a prerequisite, the attrition of his self-concept may be great. Whenever blindness becomes a prerequisite for employment, there is implied an insult to the individual who is blind. The suggestion is that the individual's personal assets, traits, and personal values are no longer the most impressive part of his being. Blindness becomes an entrance into a region of special privileges, and the individual is sanctioned in feeling he is different, undesirable to the sighted world, and that his earlier expectations of himself need no longer have the imperative quality of which he was once proud.

We must also consider that anxiety and fear play roles in determining occupational interests, especially in blind clients who possess a fair amount of these emotions as they attempt to find employment. Mahone (1960) studied the relationship between achievement motivation and realism of occupational choice as it was influenced by anxiety. Using four measures of the realism of occupational choice, he found that subjects low in achievement motivation and high in anxiety were less realistic than those who were high in achievement motivation and low in anxiety. Bernstein (1963) found that individuals who had a high need for achievement and a low fear of failure also tended to aspire to more prestigious occupations, while persons who have high fear of failure and low need for achievement aspired to less prestigious occupations. If fear and anxiety cause clients to lower their vocational and occupational sights, we would expect that, if placed in low status occupations, they would become unhappy as their fear and anxiety lessened. We would predict a high turnover in such placements because of this factor and the general characteristics of low status employment.

In another study that also bears on the general relationship among one's self concept and occupational choice and satisfaction, Morrison (1962) found that teaching and nursing students tended to describe themselves as they described workers in the professions for which they were being trained. Similar results were found by Blocker and Shutz (1960) and by Englander (1960). The implications seem clear that one's self-perceptions reflect one's aspirations, and that placement, to be successful, must recognize these aspirations.

While the importance of the factors so far discussed is well recognized, other factors, less directly connected with work, satisfaction, and occupational choice have bearing on the motivation of a blind person. These factors are not primarily part of the world of work but are characteristic of some individuals and greatly affect their interest and ability to persevere. These factors, all psychological, seem to be active in binding a person in a state of indecision or inactivity; they are behind the bane of all counselors; they are part of the so-called "unmotivated client."

A Substantial Number of Blind Persons Have Little Enthusiasm

☐ While we may question the accuracy of the term "unmotivated client," it is recognized that a substantial number of blind persons do not share the counselor's enthusiasm for training and employment. Even if we had a more comprehensive selection of job opportunities, more challenging and rewarding training opportunities, and sufficient time to counsel these clients, we would probably still be unsuccessful in placing many of them. Why are these clients unmotivated? Or, to frame a more appropriate question, "for what are these clients motivated?"

To better explain the behavior of the difficult blind client, let me review some psychological experiences and adaptive processes which result from blindness. Carroll's comment (1961, p. 77) that blindness is initially associated with a period of depression is universally accepted. Blindness is not the cause of depression in the sense that a person would not have become depressed were he not blind (Lewin, 1962). Rather, depression is a predictable reaction of a person to a threatened loss of something important—his self-esteem. Insofar as an individual's sense of personal value is shaky and based on experiences which are threatened by blindness, so the person will be affected. His depression is, in a sense, a mourning for his lost self-esteem, which he senses is gone because he imagines certain important experiences are no longer possible for him. A person may be overwhelmed with his blindness because he over-generalized the importance of his sight and identified it with life itself. In a way, he turns against himself because, in a depressed state, he furthers his disability. But for most blind persons, the period of mourning, depression, and sense of being useless or worthless is gradually terminated. Reality again gains the upper hand and the person begins to look to the future with some hope.

Care and Solicitation for the Hurt Ego

□ So, in the case of the blind person, the primary factor in continued depression is not the blindness, but the loss of self-esteem which reduces the person to a state in which he needs a great deal of care. Indeed, one purpose of a depression is to regress oneself to near helplessness so that all of one's energies and the energies of others are directed toward extending care and solicitation to the hurt ego. This attention will assuage the lower self-esteem of the person and lessen his pain (Fenichel, 1945).

In a state of low self-esteem, the energies of the person are oriented not toward interaction with the environment in the interest of personal mastery and competence, but toward attaining a sense of well-being independent of accomplishment. The person attempts to do this by continuing a pathological dependence often associated with anger toward those of us who refuse to accept the blind person's demands, or by fantasies of grandeur, power, and competency, or by both (Lampl-de Groot, 1963).

More than likely, the feeling of grandiosity does not furnish a drive toward accomplishment but rather supplies a facade of self-esteem to accompany the person's dependency and ingratiating behavior. This regressive state is often associated with a lack of interest in people and objects other than those necessary for primitive pleasures. Because this behavior often covers tremendous insecurity and the possibility of overwhelming attacks of anxiety, such persons must remain withdrawn and alone. Unfortunately, such interpersonal isolation produces a further debilitating sensory isolation. Since continuous sensory information and aggressive environmental exploration are absolutely necessary for stable mental functioning, the blind person may, by his sensory isolation, produce in himself a state of psychological helplessness. While we hope few blind persons reach the terminal state of this process, it can be assumed that aspects of the process are present in all blind clients who resist becoming involved in the threatening and demanding progression of counseling, training, and placement.

Other difficulties for which the blind are not primarily responsible augment their problems: few adequate positions, little opportunity or encouragement to participate genuinely in the process of vocational choice, few reasonable training opportunities, little basic incentive to look for any type of achievement through work, and grossly inadequate counseling help from harassed and overburdened vocational counselors.

The Sweet Deception That Our Work is Adequate

□ Finally, there is an important but touchy obstacle which each blind client faces: the problem of benefiting from counseling. As professionals, we often take refuge in the thought that although we could benefit from increased skills, our work is adequate for its requirements, and our clients are not disadvantaged to any great extent. This sweet deception can be maintained by not doing follow-up work, and by not talking with clients of other counselors (our own clients would be too fearful to discuss their evaluation with us honestly). In addition, a large case load is helpful because it does not allow time for self-reflection, follow-up studies, or some type of quality control program.

However, we cannot avoid the fact that poor placement procedures, lackadaisical follow-up procedures, unimaginative training programs, and ghetto-type rehabilitation programs are our responsibility. Even the difficult client is our responsibility. We may not be culpable for many aspects of professional work which we inherited, but the fact that they are allowed to continue is our responsibility. We know they are undesirable, and there is no excuse for not doing something about them. The fact that there are few good positions for blind persons, placements in few industries, and rehabilitation programs governed by the tyranny of numbers may someday be affected by a change in the cultural stereotypes associated with blindness. But these stereotypes cannot be influenced except by rigorous and aggressive workers who press themselves to develop employment areas in a wide range of industries, who insist that blind clients have the right to competent counseling which can only be given by properly trained persons. Blind clients have a right to be served by individuals who are employed because of their skills, not because of some factor, extrinsic to the job requirements of the position.

Work for the blind has been handicapped by a type of disability nepotism by which disabled persons are preferred to others as employees. Needless to say, this practice is degrading even to the person who is disabled, because implicit in the practice is the belief that the disabled person should be hired for the job because he probably could not get a job elsewhere.

It is difficult for any professional group to look at its own work and practices critically. But an interest in evaluation and the ability to do it is one sign of maturity in a field. Happily, there are signs that counseling and counselors are reaching this maturity. A series of articles has recently appeared discussing some debilitating characteristics of counseling which prevent the counselor from effectively understanding and aiding the client, (Kagan, 1964; Schwebel, 1964; and Wrenn, 1962).

Common to all of these articles is a realization that the counselor often becomes wrapped up in the shortcomings of his own thinking. The counselor makes conclusions about an individual and then treats him in a way that practically guarantees the individual will justify that decision. Thus, the counselor concludes client Harry is not a good vocational and placement risk, and does not arrange training or placement in a rewarding job. Harry is given a routine, boring, underpaid position.

If Super's ideas about the importance of the self-concept of vocational satisfaction and adjustment are correct, by pushing a client into inappropriate placements simply because they are available we may be impressing the client that we do not expect much of him, and encourage him to do likewise. By supporting a loss of self-esteem, we may push along the pathological process.

We will always have the difficult client with us. Indeed, he is the justification of our professional endeavors. The counselor must accept the challenge of the difficult client. The counselor must understand blindness in all its ramifications and interactions with personality dynamics, poverty, social and sensory isolation, education and changing industrial needs. The difficult blind client deserves the imaginative and aggressive interest which difficult clients with other disabilities receive, at least some of the time. He does not deserve attention of a counselor who tries to fit him into procedures which are useless for a person with his degree of disability, and who, when the client fails, dismisses him as "unmotivated, not ready for rehabilitation." No one is unmotivated—no one is unready for rehabilitation.

From these remarks, you can imagine that I have mixed feelings about Olshansky's recent article in the *Journal of Rehabilitation* (1964), in which his comments seem to put the blame for unsuccessful clients on the clients themselves, and consequently he concludes that counselors should spend more time with other clients. Our unsuccessful clients, on the contrary, are our own fault. We do not know enough, have not tried hard enough or long enough, or because of our own arbitrary decisions concerning the nature of success, have often set unreasonable expectations and consequently have missed recognizing improvements registered by our clients. Contrary to Olshansky's statements, I think we do know something about motivating persons who seemingly are not interested in their own rehabilitation. We may not have persons with this knowledge at hand, or the finances necessary to develop staff and procedures, but we are not unequipped for the difficult client.

A Program Based on Realization of a Client's Inability

☐ The difficult client requires a comprehensiveness that is seldom present in rehabilitation agencies. The program for the difficult client is based on the realization that he cannot successfully mobilize his personal assets, and consequently, the program must be oriented toward this. The program must avoid experiences that may further disorganization and a sense of helplessness in the client. For a detailed explanation of such a program, may I suggest the book *Ego and Milieu: Theory and Practice of Environmental Therapy* by John and Elaine Cumming (1962). The program described in it is designed for seriously disabled psychiatric patients, but its theory and implementation are relevant to our problems.

In summary, there are three major obstacles to the rehabilitation of the difficult blind client: those which are client-centered; those which are counselor-centered, and those which are community-centered. The client-centered obstacles revolve around the low self-esteem or the hopelessness of the client in maintaining adequate self-esteem. Many clients will consciously and unconsciously avoid counseling, placement, and other social experiences, because they fear the experiences will result in further failure and uselessness.

The counselor-centered obstacles that reduce the efficacy of work include case loads that are too large, a pattern of service that is not appropriate for all clients, an extremely limited range of job opportunities, and a tendency to resist using skills and techniques that other areas of rehabilitation consider commonplace. Perhaps all this can be summed up by saying that we are mired in the morass of our traditions. Time is leaving us behind.

The community-centered obstacles are the stereotypes which often guide the sighted in their reactions to blind individuals. These reactions reflect feelings of fear and solicitude and lead to rejection and benevolent isolation. These stereotypes will not be eliminated by talking about them; they will not be eliminated by our public education programs; I don't think they will be affected directly by professional workers in our field. They will only yield to first-hand acquaintance with independent, aggressive, and confident fellow workers, neighbors, and church members, who happen to be blind.

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Editorial Notes

The New Look of the New Outlook

Sixty years ago in April, the first issue of the *Outlook for the Blind* was published by Charles F. F. Campbell. The first paragraph in the magazine set forth its objectives:

"A forum for the free and open discussion of all topics connected with work for the blind. Especially do we hope that the problems and difficulties which confront us all, whether in the school, the shop, the home, or the community, will be considered here, and that those who have the experience and expert knowledge on these subjects will give us the results of their work and observations, that all may benefit thereby. We have no theories of our own to advocate, no projects to exploit. Our only desire is to be of service to the great cause of helpfulness to the blind."

The objectives of the *New Outlook* remain those that Mr. Campbell set forth, but the format in which they are accomplished has changed over the years.

The magazine, or at least the ink edition, has had a number of layouts, type faces, and page sizes, and once again, with the January 1967 issue, we have a new format. It is perhaps a more radical departure from the existing format than any of the changes that occurred before, except for that in January 1964 when the size of the page was increased from six-by-nine to eight-and-a-half-by-eleven.

The changes, as you can see, are those of page layout and cover design. The cover design, using art work and color, is a fairly major departure, since the *New Outlook* has generally depended on type arrangement as the basis for the cover design—except, we should say, for an eleven-year period between 1923 and 1934 when the magazine always carried the same picture on the cover—a painting of a man and a woman and some books with the phrase "Lifting the Veil of Darkness." The painting, by Percy Van Eman Ivory, is in the *art nouveau* style. It was also always printed in four colors. (Today we think a cover in three colors—black being considered a color in printing—is a pretty major addition to the magazine.)

Looking through the back issues of the *Outlook* and *New Outlook*, we find nine different styles of covers—each, through its style of type and layout, speaking for the period during which it was published.

The first issues were very serious and dignified, with Old English type used for the logo. By 1918 the cover was carrying a photo illustrating one of the articles in the issue—but still with the Old English logo, much type, and all centered very carefully on the page.

Then came the magical lady lifting the veil of darkness. This, we must point out, came at the time that the American Foundation for the Blind took over the magazine and Mr. Campbell retired.

From 1935 to 1941, the design was starkly simple, symbolizing perhaps, after the richness of the four-color picture, the difficulties and drabness of the depression years. The cover paper was always green; the type was a simple sans serif, and the table of contents appeared centered on the cover.

In 1942, the *Teachers Forum* was absorbed into the *Outlook*, and the cover lightened. It was always on grey or white paper, and the type, still sans serif, was printed in a pretty, dark blue ink. This format continued until May 1951 when a completely new design was adopted, along with the new title, The *New Outlook for the Blind*.

Eight months later in January 1952, still another format—a smaller page size and a slightly different layout of the cover—was adopted. This design persisted until January 1955 when still another logo appeared. At the same time, the use of a different color each month began. The same design and the use of different ink colors continued after the 1964 change.

Looking back through sixty years of magazines, one is struck by the way fashions in type and layout change. One is also struck by the subject matter—how similar it is over the years—the same basic problems, and even the same basic suggestions for solution. One also, of course, sees new problems and new solutions. But that is really another column.

The point of this piece is to talk about the new format—to ask you how you like it. Please send us your comments. Is it easy to read? Is it easy to find things?

We also want to remind you that for sixty years, the *Outlook* and the *New Outlook* have attempted to follow Mr. Campbell's objective of serving as an impartial forum.

We will continue to do this to the best of our ability, and we hope that the new look of the *New Outlook* will remind everyone to give a new look at their present programs and plans to see how they might benefit still more persons and to see how they might be reported and shared with others—shared, of course, through the pages of the *New Outlook*.

We hope in the next months and years to make the *New Outlook* an even better medium of news and ideas. So—send us your news announcements (for what we hope to be an expanded news section), your meeting announcements for a "coming events" listing (started this month with a few items), your letters of comment, and, of course, your full-fledged articles describing your work. P.S.S.

News in Brief

■ State annuities paid to blinded veterans will no longer be considered income in determining eligibility for Veterans Administration cash benefits, according to a decision by the VA General Counsel.

The new ruling particularly affects war veterans receiving disability pensions from the VA for nonservice-connected blindness and widows of blind annuitants receiving death pensions. It also affects blinded veterans who are dependent parents receiving compensation because of the service-connected death of a child on whom they were dependent.

The new ruling, effective January 1, 1967, resulted from a decision request presented to the VA by officials of the Blinded Veterans of New York, Inc. New York is one of the states which pays small annuities to blinded veterans who entered military service while residents of the state.

Veterans who have never applied for annuities or who have been ruled ineligible for VA benefits because of state annuities should contact the appropriate office.

■ *The New York Times* has announced projected publication of a weekly large-print edition. The 24-page paper, slated to begin next March 6, will be based on the preceding Sunday issue.

Fourteen pages will be devoted to news digested from the "News of the Week in Review" section. The last ten pages will carry a feature article by a regular *Times* columnist, plus financial, sports, and entertainment items.

The paper, printed in 18-point type, will cost $29 a year. For information write to *The New York Times Large Type Edition, 229 West 43 Street, New York, N.Y. 10036.*

■ Predictions of a vaccine against rubella before another major epidemic were issued at an international conference on vaccines sponsored by the World Health Organization and the Pan American Health Organization.

Speaking at a news meeting during the Washington gathering, Dr. Harry M. Meyer, Jr., said it no longer seems doubtful that a vaccine will be developed within a reasonable time. Dr. Meyer is associated with the Division of Biological Standards at the National Institutes of Health.

■ The National Rehabilitation Association reports that it is making recorded editions of the *Journal of Rehabilitation* available to any members of NRA who are unable to read normal printed material as a result of a physically handicapping limitation. In the past, only blind members were eligible to receive the recorded *Journal*. The annual fee to individual subscribers for this service is only $2. Additional support to cover the costs of recording and distribution has come from the Vocational Rehabilitation Administration and the American Foundation for the Blind.

NRA's Executive Committee recently emphasized the value of these recorded editions and stated its hope that increased demand will justify their continuation.

Because Public Law 89-522, passed during the last session of Congress, extends the Books for the Blind legislation to include other physically handicapped persons unable to read normal printed material, the record players obtainable by such persons free on loan can be utilized by NRA handicapped members to play back the talking book editions of the *Journal of Rehabilitation*. To acquire the use of a talking book machine a physically handicapped person must be certified by competent authority as unable to read normal printed material.

■ Donald H. Edwards has been named principal of the Utah School for the Blind and educational leader of statewide programs for blind children. Mr. Edwards holds a masters degree from Willamette University and has had additional training at San Francisco State University of California and the University of Idaho. He is former principal of the Oregon School for the Blind.

■ The Orientation and Mobility Interest Group of the American Association of Workers for the Blind, Inc., will publish a bimonthly newsletter. The publication will carry articles concerning orientation and mobility for the blind. The editor is Terrence R. Clark, mobility instructor, Rehabilitation Center, Institute, West Virginia 25112.

■ The New York City Public Library is studying large-print books and their use in libraries. It is hoped the study will provide data on type, binding, weight, and color of paper, plus the kinds of titles preferred by readers. Test collections of large-print books have been placed in two of the Library's centers.

The collections, on special shelves in each center, consist of fifteen copies of 75 different titles, including a wide range of nonfiction, classics, best-sellers, and light reading. A set of the large-print edition of the *World Book Encyclopedia* is available for reference use.

■ Dr. Frank B. Walsh, professor emeritus of ophthalmology at Johns Hopkins Wilmer Institute, has received a $25.000 award from Research to Prevent Blindness, Inc. The 71-year-old Dr. Walsh was honored for his work in neuro-ophthalmology during dedication of the Jules Stein Eye Institute at the University of California at Los Angeles.

■ Landlords have the responsibility to protect the blind from potential dangers, according to a recent Pennsylvania court decision. James Argo, a blind salesman, was awarded $27,000 for injuries sustained when the door to a floorless room was left unlocked.

■ A free monthly newsletter is now available from the Information Center-Recreation for the Blind. The newsletter and other materials on recreation can be obtained by writing to the Center at Southern Illinois University, Carbondale, Illinois 62903.

■ Elimination of architectural barriers will be studied by the National League of Cities. Operating under a federal grant, the League will examine state and local laws, as well as the work being done by non-governmental agencies in reducing barriers.

Comparative cost information will be developed on the type of construction which does not penalize the disabled. The study, expected to take one year, will include a survey of public awareness about problems of the handicapped.

■ Donald V. Wilson has been appointed president of the Leonard Wood Memorial for the Eradication of Leprosy. Mr. Wilson, who assumed his new position January 1st, served as secretary general of the International Society for Rehabilitation of the Disabled for the past seventeen years.

■ The New York Association for the Blind has established an intake division for the admission, evaluation, and referral of clients under direction of William Generette. It has also set up a new division of medical services under Miss Clare Hood.

■ Louis W. Rodenberg, past superintendent of the Braille Print Shop at the Illinois Braille and Sight Saving School, died on November 15. Mr. Rodenberg, 74, was an outstanding contributor to the development of literary braille and braille music notation. The recipient of many honors, he was given the Migel Award in 1943.

■ *Events*—January 17—National Braille Ass'n, Louisville, Kentucky; March 20-23—American Personnel and Guidance Ass'n, Dallas, Texas; March 20-23—American Orthopsychiatric Ass'n, Washington, D.C.; March 26-April 1—Council on Exceptional Children (International Convention), St. Louis, Missouri; April 12-14—National Society for the Prevention of Blindness, Columbus, Ohio; April 27-28—President's Committee on Employment of the Handicapped, Annual Meeting, Washington, D.C.; April 30-May 3—National Braille Ass'n, Philadelphia, Pennsylvania; May 21-26—National Conference on Social Welfare, Dallas, Texas.

Current Literature

Adjustment to Blindness—Re-Viewed, by Mary K. Bauman and Norman M. Yoder. Charles C Thomas, Publisher (301-327 E. Lawrence Avenue, Springfield, Illinois 62703), 1966. 272 p. $7.50. This is a follow-up to the senior author's 1954 study entitled **Adjustment to Blindness.** It is an examination of relevant research in aspects of adjustment such as impact of the blind child upon the family, early parent-child relationships, frustration, conflict, anxiety, aging, trauma to the ego, learning and motivation, etc. A bibliography of 287 articles and books is included.

"Only One Twin Can See," by Margery Byers, photographed by Allan Grant. **Life** (Time, Inc., 540 N. Michigan Avenue, Chicago, Illinois 60611), Vol. 61, No. 18, October 28, 1966, p. 89-92, 94. A picture story of Lee and Jeff Rubinstein, three-year-old twins.

Pre-Cane Mobility and Orientation Skills for the Blind. The Michigan School for the Blind (715 West Willow, Lansing, Michigan 48906), 1966. 53 p. $1.00 plus postage. This curriculum guide, for use by the classroom teacher, provides specific examples of activities, lesson plans and reference materials to ensure the student's readiness for instruction by a peripatologist.

"Blind Trainees Succeed in Industry," by Charles R. Borchert. **Rehabilitation Record** (Superintendent of Documents, Washington, D. C. 20402), Vol. 7, No. 5, September/October 1966, p. 32-33. A brief report on the VRA-supported demonstration project now completing its third year at the North Dakota State School of Science at Wahpeton, North Dakota. In this program blind persons have been trained alongside sighted students in a trade-technical school. The first blind candidates completed their courses last spring.

"A Blind Idiot Who Became a Normal Blind Adolescent," by Cyril E. Williams. **The New Beacon** (Royal National Institute for the Blind, 224 Great Portland Street, London, W1, England), Vol. 50, No. 593, September 1966, p. 235-237. (Reprinted from **Developmental Medicine and Child Neurology,** Vol. 8, No. 2, April 1966) The story of a blind boy, now age 18, who was admitted at the age of 5 to the Fountain Hospital in London. Dr. Williams, who is a psychiatrist, emphasizes this particular case is exceptional.

"Comparison of Comprehension of Two Forms of Compressed Speech," by Emerson Foulke. **Exceptional Children** (The Council for Exceptional Children, National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. 20036), Vol. 33, No. 3, November 1966, p. 169-173. Report of an experiment performed to determine the influence of both word rate and speech compression method upon listening comprehension.

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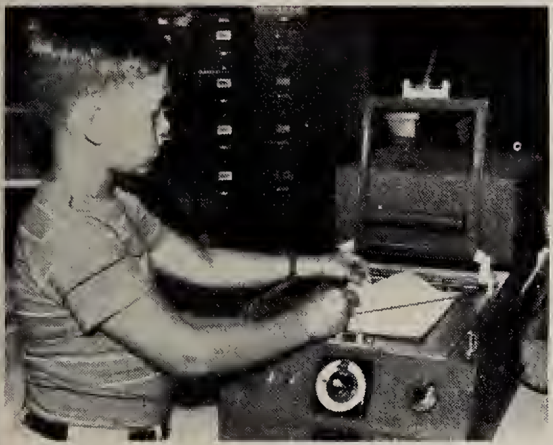

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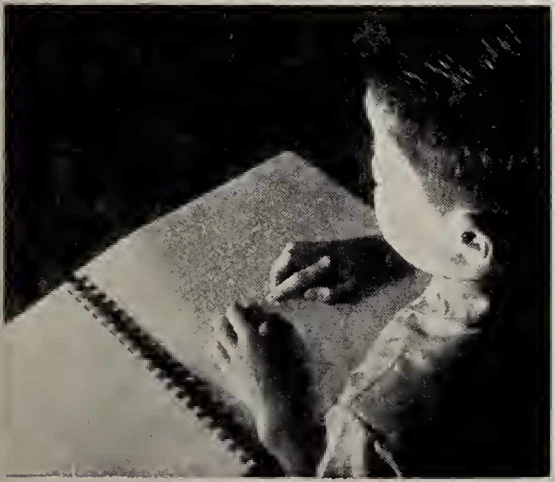

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Siblings of Visually Handicapped Children
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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

A Proposed Test for Mobility-Training Readiness

DR. RUDOLPHINA MENZEL

Associate Professor for Animal Psychology at the University of Tel-Aviv and director of the Israel Institute for Orientation and Mobility of the Blind in Kiriat Haim, Israel

MRS. G. SHAPIRA

Program director for VRA Research Project at the Israel Institute

DR. E. DREIFUSS

Co-Investigator for VRA Research Project at the Israel Institute

The need for a mobility-training readiness test was documented by Dr. Milton D. Graham in the May 1965 *New Outlook*. In his article Dr. Graham pointed to the urgency of this need, an urgency arising from the desire to reach the largest number of blind persons who can truly benefit from training. While we are aware that candidates found suitable for training through such a method will not automatically become excellent travelers, we fully support Dr. Graham's opinion about the necessity for an evaluative form.

On the basis of our work and tests which we have used in the past, we submit the following draft of contents for a readiness test to be given candidates prior to mobility training. To save space the test does not appear here as it would in a final, ready-to-use form.

We at the Israel Institute for Orientation and Mobility of the Blind feel our experience has enabled us to work out a draft which would be adaptable to all countries (with changes for local condition) and which would allow comparison of gathered data among the different nations. Since 1948 Israel has absorbed a large number of blind immigrants, most of them of working age and most of them from underdeveloped countries. Moreover, Research Project VRA-ISR-14-64 has brought us into contact with many more blind persons from all walks of life. All candidates for mobility training in Israel are tested and observed through our Institute, the only mobility center in the country.

We have intentionally omitted an I.Q. test from the draft since it appears from our observation that the value of these tests for estimation of mobility potential is questionable. There is agreement among some of our colleagues that many highly intelligent blind people find mobility and spatial orientation very difficult, while other less intelligent candidates are good in all phases of mobility.

It would be appreciated if readers would forward any changes, corrections, or additions, concerning the questionnaire to our Institute at Kiriat Haim, Israel.

Proposed Test Form

A. Personal Data

Name ______________________ Sex ________ Date of Birth ____________
Place of Birth ____________ Age ________
Address ____
Address of next of kin ____________________________ Relationship ________

Address of welfare office, institution or
person recommending mobility training ——————————
Family status: Single ——— Married since ——— Widowed since ———
Separated since ——— Divorced since ——— Remarried since ———
Number of dependents ——————————
Date of immigration (in case candidate did not immigrate directly, list countries where he stayed for long periods. Indicate duration of stay.) ——————————

——————————————————

How long has candidate lived in present locality (state if city or village; describe layout of place.) ——————————
How long has candidate lived in present home ——————————

I. Data concerning Blindness

1. How long did the candidate have sight in his home country
   From ——————— To ———————
2. How long was the candidate blind in his home country
   From ——————— To ———————
3. How long did the candidate have sight in this country
   From ——————— To ———————
4. How long has the candidate been blind in this country
   From ——————— To ———————
5. How long did the candidate have sight (item 1. plus 3.) ———————
6. How long has the candidate been blind (item 2. plus 4.)———————

II. Candidate's Appearance

1. How is the candidate in appearance:
   pleasant ——— satisfactory ——— untidy ———
   (State if candidate looks after himself or is cared for by a sighted person.)
2. Has the candidate any disfiguring features ———————
3. Body posture: erect ——— bent ——— other ———
   a) walking ——— b) standing ——— c) sitting ———
4. How does the candidate walk:
   a) slow steps ——— average steps ——— fast steps ———
   b) short steps ——— average steps ——— long steps ———
5. Does the candidate shuffle his feet:
   a) always ——— b) only when unsure ——— c) never ———
6. Does the candidate have peculiar mannerisms: ———————

——————————————————

B. Medical Data

Any limitations to mobility training from chronic or acute health problems should be stated in detail.

1. Ophthalmological Examination:

Name and address of specialist ——————————
—————————— Date of examination ———

a) Acuity without correction OD near point ——— far point ———
OS near point ——— far point ———
OU near point ——— far point ———

Acuity with correction OD near point ______ far point ______
OS near point ______ far point ______
OU near point ______ far point ______

b) Field of vision OD ______ OS ______ OU ______

c) Ability to distinguish between light and dark (in case of total blindness only) ______

d) Onset of blindness OD ______ OS ______

e) Progress of blindness OD sudden ______ gradual (from ______ until ______)
OS sudden ______ gradual (from ______ until ______)

f) Cause of the blindness and diagnosis: OD ______ OS ______

g) Does the present eye condition seem to be final or variable (toward improvement or deterioration) ______

h) Is continual treatment required ______

i) Are there complications (other than eye troubles) interfering with the remaining vision ______

j) Is the use of remaining vision desirable ______ permissible ______
restricted ______ forbidden ______

k) What outside influences may be harmful to the candidate's eyes ______

2. Examination by general practitioner:
Name and address of the physician ______
______ Date of examination ______

3. Examination of Hearing: Audiometer test can be given by Peripatologist. However, in case of doubt, candidate should undergo examination by an ear specialist. For sound localization tests, compare Section C of this test.

4. Psychological examination (if desired):
Name and address of psychologist ______
______ Date of examination ______

5. Special psychotechnical tests:
These tests were made by ______ Date ______

a) Haptic Intelligence Scale (HIS): We suggest that from the six tests described in the HIS AB Manual the following three should be used—Block Design, Patternboard, and Object Assembly. We further suggest use of the results only as an indication in evaluation of a candidate's sense of touch, orientation, and memory.

b) Verbal tests for the blind (if such tests are used in the country concerned.)

C. Remaining Senses

1. Hearing:
   a) Localization of acoustical signals indoors (to what distance) ______
   b) Localization of acoustical signals outdoors (to what distance) ______
2. Balance:
   a) Walking in a straight line ______
   b) Does candidate have tendency to the right or left ______
   c) Is he aware of tendency ______
   d) Is he able to correct tendency while walking ______
   e) Ability to turn quarter, half and full turn on orders ______
   f) Side deviations with swinging arms ______

g) Walking toward acoustical signal ——————————
h) Romberg-phenomenon* ——————————

3. Kinesthetic memory:
a) Pointing test** ——————————
b) Does the candidate know how to return to a place from which he walked ——————————
Short distance (5 m) ——————————
Longer distance (approximately 20 m) ——————————

4. Sense of touch:
a) Able to recognize objects after touching with hand(s) ——————————
b) Able to recognize objects after touching with cane ——————————

5. Sense of smell:
Make tests with different samples ——————————

6. Facial vision:
Has the candidate developed facial vision ——————————
If yes, on which part of the face does he think he feels it ——————————
what is the average height of obstacles he can detect ——————————
does the candidate detect most obstacles with the help of his facial vision
always ——————————
under favorable weather conditions only ——————————
in quiet areas only ——————————
with extreme concentration only ——————————

7. Sense of orientation:
a) Spatial imagination—can the candidate orientate himself in a furnished room and is he able to reconstruct the position of the furniture, including doors and windows, with the help of doll's furniture ——————————
b) Outdoor orientation with directions prior to setting out—if possible, determine if candidate can orient himself with the help of a braille map (raised line map)
c) Indoor orientation—see results of 7a.

D. Outdoor Mobility Data

(Travel with human guide is not considered as mobility)

1. Does the candidate claim to have mobility or to have had mobility
when —————————— state traveling aid ——————————

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* Romberg Phenomenon: When a seeing person stands up straight, closes his eyes, and puts his feet close together, his body may start swaying. This is a sign of an impaired sense of balance. Use this for testing candidates.

** Pointing Test: The pointing test is executed in the following manner—the tester, sitting on the opposite side of a table from a candidate, asks him to raise his hand about 15 or 20 centimeters above the table. The candidate then points his index finger toward the tester, who makes a similar movement so that his finger and the candidate's finger align at a distance of approximately 30 centimeters. With his free hand, the tester grips the candidate's finger and moves it toward his own until the two fingers touch. Moving the candidate's finger back, the tester asks the candidate to make his finger touch the tester's finger several times. The fingers should touch on each attempt. Of course the tester does not move his finger. Deviation of a candidate's finger from the desired direction can help evaluate kinesthetic memory.

2. In case candidate lost his mobility or if it has deteriorated or improved, state why (e.g., change of domicile, lack of motivation, etc.) ——————
3. Has the candidate had any traveling instruction before:
   a) where ———— b) how long ———— c) which traveling aid ——————
4. In case candidate has had no travel instruction, state reasons ——————
5. How does the candidate reach his place of work and/or other places he visits frequently? State if with the aid of a guide dog, a cane, an electronic or supersonic device, a human guide, or alone ——————
6. In case candidate has any outdoor mobility at present indicate if:
   a) in controlled familiar environments ——————
   b) in uncontrolled familiar environments ——————
   c) in uncontrolled unfamiliar environments after given directions ——————
7. Does the candidate make use of acoustical or other signals to help orientate himself ——————
8. Does candidate tire easily while walking ——————
9. In case of remaining vision, is this of advantage, disadvantage or of no influence to the mobility of the candidate ——————
10. Is the candidate used to travel in public transportation (state if aided or unaided) ——————
11. What is the candidate afraid of while traveling (for example: loosing his way, running into obstacles or pedestrians, street crossings, etc.) ——————
12. Does the candidate accept help offered by passersby ——————
    Does the candidate enlist help from passerby when necessary ——————
13. Is the candidate satisfied with his present travel mode ——————
    and with his travel aid ——————
14. For adventitiously blinded candidates only: Does candidate make use of his visual memories ——————
15. For cane travelers:
    a) Is candidate's cane modified to his height ——————
    b) Is candidate using an accepted cane technique ——————
    c) Is candidate using a technique of his own (tapping, etc.) ——————

E. Educational, Occupational and Employment Data

Education

1. Before onset of blindness: from age ———— to age ————
   in (country) ———— at school (indicate kind of school) ————
   and how many classes ——————
2. After onset of blindness from the age of ———— until ————
   in (country) ———— at school (state which kind of school) ————
   how many classes ——————
   a) Give details about progress of blindness, if any, during that time ——————
   b) In case school education began after age seven, state reasons for the delay. State further if difficulties were encountered during school education ——————
   c) Indicate if candidate, when blind, was in special schools or institutes for the blind ———— (from ———— until ————) educated with sighted children (from ———— until ————)

3. Spoken languages:
    a) Native language ____________________
    b) Other languages ____________ (degree of fluency) ____________
4. Knowledge of braille ____________ which languages ____________

Professional Training

1. Before onset of blindness: from age __________ to age __________ in (country) __________ in (indicate kind of institute or school) __________
   Training (indicate profession) ____________________
2. After onset of blindness: from age __________ to age __________ in (country) __________ in (indicate kind of institute or school) __________
   Training (indicate profession) ____________________
    a) Give details about progress of blindness—if any—during that time ____________________ Indicate difficulties encountered during professional training ____________________
    b) If candidate has self-taught skills, give details ____________________

Employment and/or Occupation

1. Before onset of blindness: from __________ until __________
   Where ______________ In the capacity of ______________
2. After onset of blindness: from __________ until __________
   Where ______________ In the capacity of ______________
3. Present employment or occupation (if any) Since ______________
   Where ______________ In the capacity of ______________
4. Sources of livelihood ____________________
5. Does the candidate work
    a) full time ____________________
    b) part time ____________________
    c) how many hours, daily ____________________

F. Temperament, Emotional Balance, Physical Type

(Compare all particulars with psychological examination)

1. Is the candidate self-confident ____________________
2. Does the candidate seem to be:
    a) an obvious optimist or pessimist ____________________
    b) a more active or a more passive personality ____________________
3. Emotional balance:
    a) stable ____________________
    b) unstable ____________________
4. Constitutional type:
    a) athletic ____________________
    b) asthentic ____________________
    c) pyknic ____________________
   (In case of combination of two characteristics, state them.)
5. Would you as a tester be in a position to classify the candidate in any of the following groups:
    a) Type of temperament and personality (Hippocrates-Galen)
        1. sanguine ________ 2. choleric ________ 3. melancholic ________
        4. phlegmatic ________

b) Classification of Jung-Crow

1. extrovert ________ 2. introvert ________ 3. ambivert ________

6. Further useful observations: ________________________________

G. Attitudes and Adaptation of the Candidate to his Handicap

1. Is the candidate very sensitive in general, or to his blindness in particular ________

a) Does he resent being seen in public ________________________

or being recognized as a blind person ________________________

b) What is his attitude toward the use of a traveling aid ________________

c) Would he prefer a cane ________________________________

a guide dog ________________________________

2. Does candidate make friends easily ________________ Does he have lasting friendships ________________ (If not, find out possible reasons, e.g., language difficulties, shyness, embitterment) ________________________

3. Does candidate prefer acquaintances with sighted or blind people ________________

4. Does candidate live:

a) alone ________ b) in a home ________ c) with parents ________

wife ________ children ________ other relatives ________

for how long ________________________________

5. Mutual family relations ________________________________

6. What are the attitudes of the people he is living with toward the candidate and his handicap ________________________________

7. Was/is the candidate

a) overprotected ________ in the past ________ at present ________

b) neglected ________ in the past ________ at present ________

c) completely rejected ________ in the past ________ at present ________

d) surrounded by positive attitudes ________ in the past ________

in the present ________________________________

8. In case attitudes toward the candidate have changed, what caused the change (in candidate's opinion) ________________________________

9. Have any of the factors mentioned above influenced the attitude and/or adaptation of the candidate regarding his blindness ________________________

H. Motivation

1. Is candidate applying for mobility training

a) at his own initiative ________________________________

Through the influence of:

b) his family ________________________________

c) his friends ________________________ (state if sighted or blind)

d) The social worker ________________________________

e) other influences ________________________________

2. What are the motives of the candidate

a) general wish for independence ________________________

b) urge for movement ________________________________

c) to obtain a job ________________________________

d) social activities ________________________________

e) friendships ________________________________

f) special interest in cultural life ——————————
g) other reasons ——————————

I. Complementary Questionnaire in Case the Candidate Requires a Guide Dog

1. Is the layout of the candidate's traveling area such that a guide dog would be required ——————————
2. Does it appear that the candidate will become an extensive enough traveler to justify acquisition of a guide dog ——————————
3. What is the attitude of the candidate and his family to animals in general and to dogs in particular ——————————
4. Would a dog serve as a guide only or as a living companion as well ——————————
5. Do the candidate's home surroundings and facilities allow keeping a dog ——————————
6. Would the dog be kept indoors ——————————
   or outside in a kennel ——————————
7. Is candidate on good terms with the neighbors ——————————
8. What is the attitude of neighbors and their children likely to be to the dog
   a) friendly ——————————
   b) indifferent ——————————
   c) opposed ——————————
9. In case the candidate lives alone, will he be able to look after the dog's needs by himself ——————————
   a) feeding ——————————
   b) grooming ——————————

J. Final Evaluation

1. Is the candidate qualified for mobility training*
   a) very ——————————
   b) well ——————————
   c) poor ——————————
   d) not at all** ——————————
2. Which traveling aid is advisable ——————————
3. Is candidate suitable for a beginner's course or an advanced course ——————————
4. State reasons for your decision ——————————
   Special attention must be drawn to the answers and results of the following:
   Section C (Remaining Senses) 1b, 2b, 7a, 7b.
   Section F (Temperament, Emotional Balance, Physical Type) 2b, 3, 5.
   Section G (Attitude and adaptation of the candidate to the handicap) 1, 6, 7, 9.
   Section H (Motivation) 1, 2.

Note: In many cases a positive answer to the question of the form is negative in connection with mobility and vice versa.

Physical handicaps do not preclude the candidate from mobility training, a priori.

Date —————————— Signature of Tester(s) ——————————

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* We do not think that for the evaluation a point system should be applied, but rather the whole personality of the candidate, as he presents himself during the interviews and tests, should be the criterion for the final decision.

** Cases with many negative findings should be given a trial period of training, if the candidate is not rendered unfit on medical grounds.

The WAIS as a Predictor of Educational and Occupational Achievement in the Adult Blind

RICHARD M. SUINN, Ph.D.

WILLIAM DAUTERMAN, M.A.

BERNICE SHAPIRO, B.A.

The authors are associated with the Division of Rehabilitation Medicine at the Stanford University School of Medicine, Stanford, California

Rehabilitation counselors are often faced with the challenge of providing educational or vocational guidance to blind clients. As part of a larger study,[2] data was gathered regarding the verbal portion of the Wechsler Adult Intelligence Scale (WAIS-V) and its relationship to educational and occupational achievement. It is the purpose of this report to discuss the WAIS as a source of counseling information for use with the adult blind.

The subjects were 135 blind adults who were referred by rehabilitation agencies or who responded to letters inviting their participation as research subjects. Of this sample, 68 were congenitally blind and 67 were adventitiously blind. The subjects' average age was 31.7 years. A majority were students or employed in professional-managerial work. They averaged 13.0 years of education and were earning a salary of $5,400, on the average.

All subjects were given the verbal portion of the Wechsler Adult Intelligence Scale. In addition, the subjects were interviewed in order to obtain information on educational and vocational achievements. Such information included total number of years of education, annual income (students excluded), and level of current occupation as classified by the *Dictionary of Occupational Titles.* For the adventitious subjects, an "employment ratio" figure was also computed which basically involves the total number of years the subject has been employed after blindness occurred divided by the number of years the subject could have been employed after blindness occurred. A high employment ratio score indicates the subject was gainfully employed over a major portion of his employable career. Thus, it might be considered an index of work motivation following blindness, and is a sign of adjustment to blindness.

The correlations between the WAIS Verbal IQ, scores of the WAIS subtests, and the subjects' educational and occupation statuses are reported in Table 1 for all subjects, in Table 2 for the congenitally blind subjects, and in Table 3 for the adventitiously blind subjects. Since the *Dictionary of Occupational Titles* assigns the professional-managerial positions an "O" code and the unskilled jobs a "9" code, all negative correlations in the tables indicate that high test scores are associated with high level occupations and low test scores are associated with low level occupations.

The significant correlations between the WAIS Verbal IQ scores and the educational and occupational information suggests that the Wechsler Scale is a useful instrument for counseling the adult blind. As expected, above average

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intelligence is associated with greater educational achievement as reflected in years of education. Furthermore, the blind person who scores high on the WAIS is a good vocational candidate in that he is likely to achieve a higher level of occupation as well as earn a greater income than the lower WAIS subjects. For the adventitious subjects, the results further indicate that the WAIS and employment ratio are significantly related. Thus, work motivation or adjustment to blindness appears to be related in some fashion to intellectual capacity.

Correlations Are Significant for the Adventitiously Blind

☐ Of special interest are the results which indicate group differences are important. Correlations between WAIS IQ scores and salaries are significant for the adventitiously blind subjects but not for the congenitally blind. Thus the WAIS is a useful predictor of income for the former but not the latter group. One possible explanation for the difference is the smaller sample size of the congenital group (N = 10). Perhaps with more subjects included results would be more comparable. A second possibility is the person blind from birth represents a different type of person than the individual who has had his sight taken away. This second interpretation receives some support from other reports where separate analyses of data for the two groups showed differences between the scores of congenital subjects and adventitious subjects.[1,3,6] It might be concluded that separate data, rather than combined norms, on these two groups should be made available to counselors.

Of final interest are the results which indicate the size of the relationship between each WAIS subtest and the educational, occupational variables. Again the interaction between the nature of the subject and the variable involved appears important. For example, for the congenital subjects the Similarities and Comprehension subtests show the highest correlations with occupational level, whereas Information and Arithmetic subtests rank as the highest for the adventitious subjects. The WAIS subtests which show statistically significant correlations with employment ratio, in order of highest to lowest correlation are: Comprehension, Similarities, Vocabulary, and Arithmetic.

TABLE 1

Correlations between Wechsler Scores and Educational, Occupational Data for the Total Sample

	Educational, Occupational Variables		
WAIS SCORES	*Total Yrs. Education (N = 135)*	*Current Occupation (N = 48)*	*Salary (N = 47)*
WAIS Verbal IQ	.51***	—.56***	.40**
Information	.54***	—.57***	.26
Comprehension	.52***	—.31*	.30*
Arithmetic	.33**	—.29*	.24
Similarities	.51***	—.57***	.33*
Digit Span	.23**	—.20	.10
Vocabulary	.59***	—.40*	.30*

* $p = < .05$
** $p = < .01$
*** $p = < .001$

TABLE 2

Correlations between WAIS Scores and Educational, Occupational Data for Congenitally Blind Subjects

	Educational, Occupational Variables		
WAIS SCORES	*Total Yrs. Education (N = 68)*	*Current Occupation (N = 11)*	*Salary (N = 10)*
WAIS Verbal IQ	.55***	—.67*	.09
Information	.63***	—.68*	—.01
Comprehension	.63***	—.69*	.12
Arithmetic	.38**	—.15	—.13
Similarities	.59***	—.85***	.19
Digit Span	.27*	—.12	—.33
Vocabulary	.62***	—.48	.39

* $p = < .05$
** $p = < .01$
*** $p = < .001$

TABLE 3

Correlations between WAIS Scores and Educational, Occupational Information for Adventitiously Blind Subjects

	Educational, Occupational Variables			
WAIS SCORES	*Total Yrs. Education (N = 67)*	*Current Occupation (N = 37)*	*Salary (N = 37)*	*Employment Ratio (N = 55)*
WAIS Verbal IQ	.51***	—.52***	.46**	.31*
Information	.48***	—.51***	.33*	.17
Comprehension	.42***	—.19	.32*	.38**
Arithmetic	.28*	—.45**	.30	.27*
Similarities	.47***	—.38*	.43**	.32*
Digit Span	.31**	—.24	.17	.18
Vocabulary	.56***	—.37*	.29	.31*

* $p = < .05$
** $p = < .01$
*** $p = < .001$

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Blind Trainees Succeed in Industry

CHARLES R. BORCHERT

Mr. Borchert is coordinator-counselor of the VRA-supported research project he describes in this article

Can blind persons be trained alongside sighted students in a trade-technical school and then be sent out to compete for jobs in the industrial world? A demonstration project seeking an answer to this question is just completing its third year at the North Dakota State School of Science at Wahpeton, North Dakota.

So far, teachers, students, and employers feel that the program is developing a "yes" answer. One evidence of the affirmative answer is that six of the seven blind students who were the first to complete the two-year machine shop course last spring are working in competitive industrial jobs and doing well in them.

You may ask if these men learn to operate machines like metal lathes and milling machines. Yes, exactly that and more. The quality of their work is excellent by comparison with their sighted fellow students and their safety record is exceptional.

The six graduates hold varied jobs. A totally blind, married student from Rock Island, Illinois, is employed by the John Deere Company in East Moline, Illinois. A married man with two teenage sons is working in a privately owned machine shop in Waterloo, Iowa. A 23-year-old South Dakota farm boy is employed by the Cessna Aviation Company in Wichita, Kansas. A talented folk singer from Kansas is a machinist with the Westgo Manufacturing Company of West Fargo, North Dakota. A fifth graduate, a former Navy man, is a quality control inspector on the Apollo moon project. This, as far as we can determine, is a first in this type of work by a blind person.

How did this unusual training program get its start? And how was it that the State School of Science at Wahpeton was selected for this pilot project?

First, it is a cooperative venture of Federal and State vocational rehabilitation programs to determine the effectiveness of a regional trade-technical training program for the blind at an established and recognized trade school. Industrial and educational leaders have long recognized that the major difficulty in placing blind persons in competitive industry jobs is that qualified and trained blind job candidates just were not available. Besides the handicap of lack of vision, blind persons more often than not found that they had to be better qualified than their sighted competitors to succeed on a job. Therefore, training, which was almost impossible to get, was identified as the key to the blind person's chance of becoming a better producer for society.

Some trade schools in the past have accepted blind students, but because no

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one community could supply a continuing number of these students, programs lacked continuity, and faculty interest lagged. Thus it was concluded that a training program based on attracting blind students from a wide area possibly could succeed where other attempts had failed.

I'm Going to Have to See It to Believe It

☐ When North Dakota's director of vocational rehabilitation visited the campus, along with representatives of VRA, the idea of enrolling blind students in the school was talked over by the school administrators. With somewhat of a "I'm going to have to see it to believe it" attitude, school authorities decided to try this new approach for training blind persons.

The North Dakota State School of Science is operated primarily for North Dakota residents but accepts students from nearby areas. In this special project, the fifteen students enrolled in the spring term came from North Dakota, Oregon, Florida, New Jersey, Illinois, and Indiana.

The blind students are given no special favors—and they ask for none. They spend forty hours a week in shop and classroom instruction, the same as other students in the trade-technical courses. About half the time is spent in the shop while the remainder is spent on related subjects, such as communication skills, business fundamentals, applied science, industrial relations, sales psychology, mathematics, welding, and metallurgy. They work and study in the same area and at the same time as regular students and observe the same rules.

The only significant difference is that the blind students have individual instruction in their major course areas such as machine shop and the small engine mechanics courses. Class notes are taken in braille and the textbooks are all tape recorded. One of their two shop teachers is an experienced instructor of the blind; the other is a veteran teacher of auto mechanics.

The blind students are all men, ranging in age from eighteen to fifty-five. Two students have guide dogs to lead them around campus and accompany them to class. Others, also totally blind, make their way with the aid of a long white cane.

The No-Sympathy Attitude Makes Better Students

☐ What do graduates and students say about the program? One graduate, who hopes some day to train other visually handicapped persons, believes that the no-sympathy-for-the-blind attitude in the classrooms and shops makes blind students better students. Another says that being put in classes with sighted people "is the best thing they could do for us because blind people, if they intend to go out and work, will have to live and compete with sighted people. This is the place to learn how to do just that."

A 21-year-old student, in his second year in small engine mechanics, is confident that his courses—which include theory and practical repair and maintenance of two- and four-cycle engines, electric arc welding, blueprint reading, and salesmanship—will prepare him for running his own repair shop some day.

Class instructors have observed that the determination and initiative shown by the blind students often amazes and encourages sighted students in the same shop area to do better. "There's one thing about these (blind) boys," they note. "They don't goof off a bit. We can't find a job they can't do. Once we transmit a mental picture of the job to be done to their minds, your job is practically done."

Employer Is Now Willing To Hire Other Blind

☐ The employer of one of our graduates told us: "He runs the lathe and drill press and assembles equipment. In fact, he runs just about any machine we have in our shop. I would be more than willing to take on more of the blind graduates if they are qualified workers and come anywhere near this man's abilities."

Plans are for this program to be continued under State sponsorship upon completion of the research grant period. Obviously it has proved satisfactory in all respects but the "proof of the pudding" will be the evaluation of the graduates and their placements in industry in the years to come.

Report on WCWB Executive Committee and Committee on Technical Appliances

A week-long meeting of the Executive Committee of the World Council for the Welfare of the Blind will open Sunday, April 16, at Belgrade, Yugoslavia. This will be the first meeting of the group since the WCWB General Assembly occurred in New York City in July 1964, and probably will be its only meeting until it convenes immediately in advance of the next quinquennial Assembly in 1969. Local arrangements for the meeting are being made by the Association of the Blind of Yugoslavia, headed by Mr. Stevan Uzelac, who is a vice president of WCWB.

According to Eric T. Boulter, president of WCWB and associate director of the American Foundation for Overseas Blind, there are a number of major business and policy matters to be reviewed by the about thirty members of the executive group. Among decisions to be reached will be the setting for the 1969 Assembly (which will probably be somewhere in Southeast Asia). While such decisions will be reported by the *New Outlook for the Blind* and other journals throughout the world, Mr. Boulter indicated that persons specifically interested in World Council matters should contact his office at the American Foundation for Overseas Blind, 22 West 17th Street, New York, N.Y. 10011.

A number of special committee reports will be received, studied, and acted upon during the coming meeting in Belgrade. Among these, of particular interest is that of the Committee on Technical Appliances, chaired by M. Robert Barnett, which has been cooperating for the past several years in the development of the International Research Information Service (IRIS), headquartered at the American Foundation for the Blind and at the Royal National Institute for the Blind, London. Part of this committee's report is a statistical analysis of IRIS activities since 1964. The committee chairman has made available the following excerpt from that report:

The planned operation of IRIS was given, in general terms, during the Paris meeting of the Technical Subcommittee of the WCWB in April, 1963. The main goals and purposes from that point forward are contained in the very first prospectus for the International Survey of Technical Devices drawn up early in 1960. The excellent planning of the organizers of that project is reflected in the fact that all activities since then are oriented around the objective of realizing those goals.

Organization of IRIS Remains the Same

☐ Although there have been changes in staff and clerical help, the organization of IRIS remains essentially the same as at its inception. It operates under the direction of Mr. Leslie L. Clark who otherwise is responsible in his overall work to Dr. Milton D. Graham, Director of the American Foundation for the Blind's Research Department. His activities have the continuing support of two other Foundation divisions, the Publications Division and the professional reference library of the M. C. Migel Memorial Library.

In general, the activities of IRIS center around the collection and dissemination of research information. The publications program includes Research Bulletins, bibliographies on selected areas of research, state-of-the art reports, and proceedings of conferences. A document handling system for research data has been developed and consultation has been given to researchers initiating projects involving blindness and severe visual impairment. Contact is maintained with the research community by actually traveling to laboratories, research institutes, universities, and the like, and through an extensive correspondence (about 400 letters a year, half of which are from researchers and require extensive comment).

Primary and Secondary Audiences for Information

☐ The primary audience is the research community; but activities are reported to the secondary audiences of practitioners through publications like the *New Outlook for the Blind* and through correspondence. The research community served is reflected in the IRIS mailing list. Twenty-four countries, and the United States and Puerto Rico, are included in that list; 80 percent of the recipients are in the USA, 15 percent in Europe, and 5 percent in other countries. If one assumes that IRIS probably is reaching not more than 95 percent of all sources of information or activity, the percentages of persons on the mailing list might also be assumed to be a reflection of the present distribution of research effort in terms of money and man-hours. Sixty-six percent of the group are researchers or teachers of graduate students; 26 percent are engaged in providing services to blind persons; 5 percent are in libraries; and 3 percent are in other areas such as foundations, overseas agencies for the blind, and the like. The 22 percent of recipients who are listed as academic are professors who make their copies of publications available to students, so the effective readership is far larger than the recipient total of about 500 would imply. In addition to the distribution among the research community, Bulletins are sent to other interested persons through the Publications Division of the Foundation (Single copies $1.50; one-year subscription, $6.00).

Since 1964, IRIS has published twelve *Research Bulletins,* three proceedings of national and international conferences, two state-of-the art reports, with two additional in preparation, three bibliographies and two more in prepara-

Continued on page 52.

Siblings of Visually Handicapped Children

LUCIANA VISENTINI STEINZOR, Ph.D.

Dr. Steinzor, of New York City, is a social psychologist

How is a blind child regarded by his sighted brothers and sisters? What role does he play in the network of relationships with other siblings and parents on one hand, and with peers, relatives and neighbors on the other? Does he serve as the focal point on which all other associations converge? Is he isolated and ignored, or is he involved in many well-differentiated relationships? Is he seen as one of "the blind," with the stereotyped connotations belonging to that phrase?

Few studies on siblings of handicapped children have been conducted (Wood, 1942; Gates, 1946; Prout and White, 1956; Shugart, 1958; Graliker, 1962; Schreiber and Feeley, 1965). None of these deal with visual disability, although there are references to the meaning of sighted children in the same family with a visually handicapped child (Sommers, 1944; Lowenfeld, 1956).

Gaining insight into growing up in close contact with a visually handicapped boy or girl was the aim of the study presented here.

Sixteen Siblings Are Interviewed

☐ This was an exploratory study involving interviews with sixteen siblings of visually handicapped children admitted or seeking admission to a psychiatric clinic connected with an agency for the blind. The severity of the visual handicap was various; in all cases it was complicated by intellectual and emotional disturbances. The age of the siblings ranged from seven to sixteen years; there were seven boys and ten girls in the sample, from nine families. Six of the interviews were conducted in the homes of interviewees, while the remainder were conducted in the researcher's office during the period from June 1963 to March 1964. The interview schedule was structured and open-ended. The analysis of the data consisted almost totally of observations and interpretations of themes common to most or some of the interviews, since the sample's heterogeneity and the study's exploratory nature did not allow more precise statistical investigation.

In one part of the interview respondents were asked to complete two sets of stories. One set had a sighted child as a protagonist; the other, a blind child. Answers to stories about sighted children were compared with those about blind children.

Some trends were very clear. Blind children were presented as needing more help than sighted children. This result can be considered positive since "help" was defined in this study as realistic help, offered without superiority or over-

This article reports research conducted as part of a Demonstration Project, A Mental Health Center for Disturbed Blind Children, directed by Walter Kass, Ph.D., and Arthur E. Gillman, M.D., established by grant MH-1044 from the National Institute of Mental Health at the Jewish Guild for the Blind in New York City.

protection. However, attitudes of kindness and attitudes of aggression were expressed more often toward the blind than toward the sighted, pointing to the feeling that special treatment and protection with a tinge of pity characterized relationship with the blind. Attitudes of supervision were expressed with equal frequency toward sighted and blind children indicating that being family members made the siblings more aware that blind children were also supervised, given orders, and expected to live up to common group norms. At least on this ground they were considered part of the group. That this acceptance was limited could be seen by the trend of lower cooperative attitudes toward the blind than toward the sighted, pointing to lack of readiness to share in common activities with equality. The severity of the impairment of the handicapped siblings (all multiply handicapped) may have accounted for this result.

A Special but Unequal Part of the Family

☐ The handicapped child was usually considered a special part of the family and was accepted as such. This acceptance took the form, especially among older siblings, of recognizing that the blind child needed particular care and could only partially participate in the usual activities of the family. Emphasis was put by most of the respondents on how easily they could engage in games with their blind siblings. These games could range from outdoors hide-and-seek to just building with blocks or handclapping. In other words, the feeling was expressed that blind children could share in activities, but not in an atmosphere of equality. What was underlined was admiration for the handicapped child's ability to have some part in these games; how well he could hear, how surprising it was he could tell one person from another, how fast he could run, etc. In regard to his participation in family life, it was said that he could, on the whole, take care of his own room; he could put on most of his clothing; he could help with the dishes and a few other housekeeping chores. Again, these statements were made without the matter-of-fact attitude that would have given them a connotation of real acceptance. Anxiety was conveyed about showing the best side of the picture, as if the respondents had, for a long time, put themselves through the process of wanting to see the best in their family situation.

Blind Siblings Belong To a Different Group

☐ A minority of siblings conveyed a feeling that while their handicapped brother or sister was part of the family, he or she also belonged to a different group with which the sighted children had no relation. The group was one composed of blind children and was usually concretely identified with a special class or summer camp for the blind. "He feels better with other blind children; they understand each other better." "Friends around here are too rough; the blind children in camp are better."

The majority of siblings declared the handicapped boy or girl had sighted friends in the neighborhood; they were the respondent's own friends who came to their home and played games which included the blind child or who alone engaged briefly in play with the blind child. Only one girl, seven years old, thought of her twelve-year-old brother as spending most of his time sitting by himself in the backyard with a transistor radio. She felt he would have been happier with other blind children, and that although her friends and her other siblings' friends at times talked and played with her blind brother, he was in need of friends of his own. This girl was one of four siblings interviewed from the same family; the other three (two boys, ten and fourteen years old, and one fifteen-year-old girl) while saying that their handicapped brother had no friends of his own, stressed the fact that their friends had accepted him and were cordial to him. They did not show concern for his loneliness, as if this were a proper state for him.

Few Express Resentment Against Blind Siblings

☐ Resentment or jealousy against a handicapped brother or sister was expressed in only a few cases and then by younger siblings. A boy of ten said of his sixteen-year-old sister, "She likes to be blind; she is being taken every place and is treated better than my brother or me." Another ten-year-old boy said that his blind brother aged twelve, "is enjoying it; he is getting practically everything." A seven-year-old girl showed her resentment in a more complex way; she did not feel that her fifteen-year-old brother was better treated in the sense of receiving more from her parents, but she strongly felt a loss of her freedom and resented having to plan her time according to her brother's needs. She would accompany him every day in the playground where he could meet another visually handicapped boy or where she had to keep fetching a ball he would send "five miles away;" her conclusion: "It gets boring."

The prevailing attitude revealed in the study was one of protection and care not to hurt the feelings of the handicapped child. In this context, any feeling of competition was almost totally absent. Only one boy said of his older blind brother, "He is the best eater of all, but now I have got a big appetite and he is the second best." It was interesting that the only competitive note was struck at such a primitive level as eating.

Children Do Not Discuss Blindness with Siblings

☐ Similarly, there was a lack of openness in discussing the condition of a handicapped boy or girl. None of the respondents had spoken with their handicapped sibling about blindness. They feared hurting the child's feelings, as if blindness and other disturbances were something not to talk about, something that was best to ignore. Questions of friends and neighbors were unwelcome and considered "nosy"; in fact, just one respondent, a fifteen-year-old girl, said she did not resent discussing her brother's blindness with friends. Although only one of the siblings recalled a particularly unpleasant episode about a lady offering money to his brother, they all resented people staring at the brother or sister while walking along the street. "I don't like to go out with him because people start looking . . . I'd like then that we would both go away fast." The only persons with whom the respondents seemed to feel free in talking about their siblings and about blindness were their parents, and mainly their mother. They reported talking about what was best for the blind sibling, how to deal with him, what school was desirable, etc. They remembered their mothers helping them, in younger years, in dealing with the handicapped child and telling them how to assist and what to expect.

Only One Boy Had Read a Book Dealing with the Blind

☐ In general, being the sibling of a blind child did not seem to make for deeper interest in blindness and in the lot of blind people. The siblings had, as a whole, very little information about blind people in general. Only one boy had read a book dealing with the blind (a book, left by a social worker, on how to help the blind be more self-sufficient). Even the name of Helen Keller was not a familiar one. Contact with other blind people was limited to a few visits to summer camps or very sporadic encounters with schoolmates of the sibling. This scarcity of information was accompanied by a generally stereotyped and negative view of blindness. Blindness was defined as a world of darkness, as the absence of light, as the inability to relate to the outside world through sight. It was defined in negative terms: a blind person was a person who can't relate through sight (a terrible state to be in). The blind person was one who had a definite lack of something essential to normal living, rather than one who relates to the world through other senses, who has his own way of perceiving and imagining objects. Siblings who were blind were categorized on a scale of sightedness-blindness, with great emphasis on how much they could see.

The respondents almost constantly conveyed the wish to know more, to gain a better perspective on blind siblings' comparative abilities, on their own experience of living with a blind person, and on the abilities and possibilities of blind people. Interviewing seemed to provide a setting in which respondents felt their experience with a blind child was exceptional, and that through their unusual experience, they had a contribution to make. They felt that other people might profit from their feelings and thoughts and, especially, might wish to hear these (mainly with themselves, not their handicapped siblings, in mind). The sibling, in this respect, had always received a secondary interest and had not been heard for his own sake.

The Four Who Wished Their Brother or Sister Would Gain Sight

☐ Was the handicapped child of great importance in what his siblings wished for and aspired to? Respondents were asked to express their three main wishes and to visualize their life as adults. Only four siblings mentioned the wish for their brother or sister to gain sight. It was of interest that this wish was associated with the denial that the handicapped child belonged to the group of "the blind." It was found exclusively among those respondents who had stressed how relatives and friends already accepted their handicapped sibling. It seemed to accompany the wish to make such acceptance even fuller.

The only disturbing note was found in a small number of interviewees in regard to the view of their future family life. Two girls (ten and thirteen years old) and one boy (ten years old) spoke of a future family as a burden to be avoided as long as possible. One respondent, a boy aged thirteen, spoke of his handicapped brother as having to be part of his future life; he would take care of him when his parents were old and he would get married on the condition that his wife help him with his brother.

Summary

☐ In summary, the siblings of visually handicapped children usually considered their blind brother and sister as a special member of the family, in need of care and kindness, but at the same time capable of participation in common activities, although within limits. Rarely was the handicapped child seen as belonging to "the blind." The siblings had scant information about blindness in general, very little contact with other blind children or adults, and exhibited a stereotyped view of blindness and uncommonly negative opinions of blind people as a group. It was quite evident, however, they wished to know more and to share the experience they were having, and had a need to feel it was valuable and unusual in order to gain a perspective on its meaning. Some disturbances were shown in connection with future family life; these were, however, exhibited by a small minority of respondents.

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tion, a number of miscellaneous papers, and duplications of documents of special interest. In addition to these direct activities of publications, IRIS has been involved in the review and recommendation to the AFB of monographs for publication in the AFB Research Monograph Series in several instances, particularly of the written reports of researchers overseas who have done exceptionally interesting work that would otherwise not be made available to the English-speaking community. The dissemination of these publications has been aided by a grant from a private foundation, especially for the distribution of the four-volume Proceedings of the 1962 International Conference on Technology and Blindness to members of the research community who could not, for a variety of reasons, afford to purchase them. Almost all of these are overseas. A bias toward international exchange is reflected in the widely-distributed reports of European trips which were made by M. D. Graham and L. L. Clark in 1964 and 1966, reports which have elicited many expressions of interest in our work.

At the end of June of 1966, the document handling system developed by IRIS was permanently installed in the Foundation's library in New York. The system comprises 1000 documents, indexed according to their subject content, and a set of two card catalogs, one of authors, and one of subjects. In addition, an extensive dictionary of indexing terms, a Scan-Column Index, and directions for use of the system have been developed. The Scan-Column Index is a type-

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Accreditation and the Voluntary Health Movement

ALFRED M. POPMA, M.D.

Dr. Popma, as chairman of the American Medical Association's Council of Voluntary Health Agencies, presented this paper at the Second National Voluntary Health Conference in 1966

Voluntarism is a uniquely American institution originating in colonial times out of the concern of one neighbor for another. Illness, hard times and disaster were common occurrences in early America, and survival was dependent upon sharing of food, labor and service in many communities. Upon this concept of helping one's neighbor, there arose a system of organizations aimed and directed at helping others who were in special need of assistance under the aims and purposes of the particular organization involved. The emphasis on the development of voluntary agencies and organizations created for health and welfare purposes has continued, with a resultant rapid and marked increase in these eleemosynary groups, particularly during the past three decades.

The growth and expansion of a number of health and welfare agencies, as well as their programs, has paralleled to a large extent the growth in our population, along with the vast changes in present-day living brought on through research, education, transportation and communication. Broadly speaking, today the concern is not only that of neighbor for neighbor, or friend for friend, but also the concern of the government for individual and voluntary agency for individual.

Specialized Programs Meet Once Non-Existent Needs

☐ The early American concerns of food and shelter have now in mid-twentieth century expanded into many highly specialized programs to fulfill needs which were non-existent even as little as three decades ago. A child born today with a congenital cardiac defect immediately becomes the object of concern of family, community, local, state and national government, as well as an object for assistance by two or three voluntary health or welfare agencies operating at community and national levels. All of these forces today stand ready and willing to provide a variety of services aimed toward the correction of the defect so that the infant may grow and develop as a normal healthy citizen with a normal longevity.

With the rapid evolution of the entire field of voluntary health agencies there has emerged upon the American scene organizations which have their interests in a single disease entity, and others which concern themselves with multiple disease and physical conditions. In many instances there has been duplication of effort, while others have limited themselves to highly specialized portions of the health field.

The one characteristic which is common to all of the voluntary health agencies is that of an appeal for funds for their operation. Even the appeal for

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Dr. Popma's paper appeared in the *Proceedings of the Second National Voluntary Health Conference*, published by the American Medical Association in 1966.

financial support varies tremendously from that of the agency which limits its appeal to certain small groups of people, to those which have broad coverage in nationwide fund raising campaigns, and to those which receive their financial support from funds which are raised jointly in local communities through united fund efforts.

There is a wide variation in the manner and methodology of operation of many of the voluntary agencies, and there is considerable variation in the type and amount of medical guidance given to these agencies, both at national and local levels. In the past there have been reported instances of irregularities in the management of funds by one or two of these agencies, and there has been public criticism of others because of duplication of efforts by organizations having similar aims and purposes. There has also within the past decade come into the forefront much difference in thought regarding the method of fund raising of all of these voluntary health agencies.

Recommendations from the 1945 Study by Gunn and Platt

☐ In 1945, there was published a study of voluntary health agencies by Selskar M. Gunn and Phillip S. Platt, which received widespread attention throughout the country by the leaders in the public health field because of their findings and recommendations. The study pointed out that the voluntary health agencies had a proud record of achievement, and have had the confidence and support of the public. The report pointed out that because of the imaginative and courageous leadership which had been demonstrated, they would continue to be invaluable and necessary assets to our community life.

The study also stated that the independent and often uncoordinated attacks on specific diseases without central or unified planning had resulted in confusing the public, both as to the goals of the individual agency, as well as to the public health. Gunn and Platt, therefore, made certain recommendations which they felt were necessary for these agencies to carry out for their revitalization. Among these were searching self-analysis, concentration on the strengthening of executive and board leadership, effective coordinated health planning, the simplification and unification of appeals for public support, the transference of appropriate activities to official agencies, and the recognition of the primary position of leadership of the offical agency, with support being directed toward strengthening these official agencies. There was also a recommendation for the reorganization of the National Health Council, and the pooling of appeals of the national voluntary health agencies into a unified nationwide campaign.

Recommendations of a 1961 Study

☐ In 1961, there was published a study of the voluntary health and welfare agencies in the United States, which was conducted by a private citizen's committee, under the direction of Robert H. Hamlin, M.D. This committee received its financial support from the Rockefeller Foundation. Among the major recommendations made by Dr. Hamlin in his report were two of special interest. The first recommendation was the appointment and financing of a national commission on voluntary health and welfare agencies. The second recommended the development of a uniform accounting and financial reporting system for the voluntary agencies.

The Hamlin recommendation dealing with uniform accounting was already in the process of being studied and implemented at the time the report was made.

Agencies Have Begun Using Uniform Accounting System

☐ This problem was considered by the National Health Council, and under the aegis of this Council a study was being made, which was subsequently completed, resulting in a system for uniform accounting and reporting which has already been adopted by a number of the voluntary health agencies. The National Social Welfare Assembly also adopted these standards and is now in the process of working with its member agencies on implementation.

The Hamlin recommendation for the formation of a national commission received much serious thought and study, and efforts were made to establish a national body which might function as an evaluating agency with respect to the role of voluntary health agencies in modern society. The plan envisioned studies in depth made by this commission, which in turn would present to the American public a series of reports and recommendations on the voluntary health movement. It would further initiate studies of criteria for the evaluation of voluntary health agencies, as well as coordinated planning for health and welfare agencies, and voluntary agency support of research and professional education. The "Hamlin Report" also pointed out certain deficiencies and lack of coordination in professional education programs as they were currently being conducted by the various voluntary health agencies.

Continuing Professional Education Programs of Voluntary Health Agencies

☐ Since these professional education programs were almost totally those of continuing education for practicing physicians, the American Medical Association through its Council on Voluntary Health Agencies offered assistance to the agencies in correcting the deficiencies which were present. Following many months of study and conference with the voluntary health agencies that were conducting professional education programs, the Council on Voluntary Health Agencies assumed the leadership in organizing a Committee on Continuing Professional Education Programs of Voluntary Health Agencies whose membership is composed of representatives from the various agencies conducting such programs, appropriate AMA councils and members-at-large. This Committee has begun its work, and it is anticipated that many benefits will accrue through the coordinated efforts of the agencies concerned. The work of the Committee is directed toward formulating high caliber continuing education programs for the practicing physician.

Main Hamlin Recommendations Failed To Be Implemented

☐ The main recommendation of the "Hamlin Report," for establishment of a national commission, failed to find the necessary support, and for various reasons, including the lack of financial support, was never implemented.

A careful analysis of this recommendation, and its subsequent failure of implementation, suggests that many of the implications in this recommendation were untenable to a large group of people, both within and without the voluntary health and welfare agencies. In addition, there was created a considerable reluctance on the part of many individuals to lump together both health and welfare, since the finding prevailed that such broad coverage would make the task of such a commission impossible to accomplish.

Efforts at regulation and accreditation of voluntary health agencies were not to be denied. Both in 1960 and in 1963, resolutions from various component associations were introduced into the House of Delegates of the AMA, which dealt with the problem of accreditation in some form or another. One of these resolutions requested the AMA to enter an extensive study in depth of all of the voluntary health agencies, and to make public the findings of such studies. The action of the AMA House of Delegates was that "the AMA should maintain a position of neither approving or disapproving voluntary health agencies, and that the AMA through its Council on Voluntary Health Agencies should maintain its position of offering guidance on medical aspects of national voluntary health agency programs." In addition, legislative programs have been carried out in some states, which tend to regulate and control the organization and the functioning of voluntary health agencies.

More and more thought is being given throughout the various states to enact legislation which will require licensing, registration and conformity to state law for the operation of a voluntary health agency within a state. Many of these legislative efforts are developing with a lack of coordination, even though they have as their prime purpose the general protection of the public in terms of the overall operation of an agency which raises funds through public appeal. There are today at least seven states which have enacted some form of legislation requiring varying degrees of conformity by voluntary health agencies organized and operating within these states.

The First National Voluntary Health Conference

☐ In September 1964, the AMA sponsored the First National Voluntary Health Conference. Attending this Conference were some 200 leaders in the national voluntary health movement. The Conference subject was "The Voluntary Health Movement Today and Tomorrow." Opportunity was given to the participants to explore the presently existing patterns of voluntary health organizations and to discuss effective methods of working together at the national level for the improvement of voluntary health agency programs, to emphasize the fundamental responsibilities of these voluntary agencies, and to provide ideas and suggestions for the development of programs in the voluntary health movement. As a result of two days of discussion, the participants agreed that the feasibility of an overall accreditation program for the voluntary health agencies should be explored. It seemed to be the feeling of these leaders in voluntarism, that if the entire movement was to be strengthened and improved that some criteria might be assembled which could be used as a yardstick for the measurement of the effectiveness and the worthiness of voluntary health agencies. It was further suggested that the American Medical Association's Council on Voluntary Health Agencies was in excellent position to carry on preliminary studies in order to determine both the necessity and the feasibility for such an accreditation program.

AMA Council Carries Out Various Studies

☐ As a result of this request from the Conference, the Council on Voluntary Health Agencies has during the past year and a half conducted such exploratory studies, and at this time wishes to report as follows.

The efforts of the Council have been two-pronged:

(1) A review of existing efforts in the different types of national, state and local evaluation of programs for voluntary health agencies, as well as of accreditation efforts in the hospital and nursing home fields.

(2) A series of meetings with those who have a legitimate interest in the subject of accreditation of voluntary health agencies.

In April and October 1965, the Council met with representatives of the National Social Welfare Assembly, the National Health Council, National Information Bureau, the American Association of Fund Raising Council, the National Better Business Bureau and the National Budget and Consultation Committee. In July 1965, the Council met with representatives of twenty-eight national voluntary health agencies. In October 1965, the Council met with representatives of business, industry and labor groups.

Some Type of Evaluation Is Much Needed

☐ At this stage of the Council's progress, three points are now apparent:

(1) Some type of evaluation other than that presently in process probably is needed to strengthen the voluntary health agency movement.

(2) While there is substantial guidance from the public and health professionals in the development of programs of voluntary health agencies, there are few yardsticks available to measure the effectiveness of these programs. It has been stressed that this is particularly true concerning the medical aspects of programs of voluntary health agencies.

(3) The Council does not plan to suggest that the American Medical Association assume the responsibility for or establish an accreditation program for voluntary health agencies.

The Council is convinced that it is not medicine's role to assume overall responsibility for the evaluation of voluntary health agency programs since many facets of their operations do not involve medical judgment.

Several Plans for Further Evaluation and Accreditation

☐ As the study has progressed, several alternative plans have been suggested to provide further evaluation and accreditation of voluntary health agencies. These are not Council recommendations, but are suggestions which the Council has gleaned in its course of studies, conversations, and conferences:

(1) Strengthen the present "Criteria for Membership of the National Health Council" by the addition of medical criteria.

(2) Add to the efforts of the National Information Bureau by having the Council on Voluntary Health Agencies develop and transmit to the NIB criteria for medical progress of voluntary health agencies.

(3) Form a national federation of voluntary health agencies which would be a self-policing membership commission of voluntary health agencies.

(4) Create a joint commission on accreditation of voluntary health agencies organized similar to the Joint Commission on Accreditation of Hospitals, with both American Medical Association and voluntary health agency backing.

(5) Create a broadly based commission on accreditation of voluntary health agencies with adequate representation from voluntary health agencies, organizations which are already doing some form of accrediting, the American Medical Association, corporate and individual givers, and the public at large.

(6) Institute a national commission on voluntary health and welfare agencies with broad citizen involvement similar to the original suggestion from the Hamlin Report, that would include a task force on accreditation.

(7) Support a national health fund—a federation of national voluntary health agencies to raise funds once a year for health research and education, to

allocate these funds on the basis of relative needs, to coordinate basic medical research and health education, to develop more effective liaison with governmental and international agencies, and to utilize more effectively volunteer service.

Medical Criteria Receive Mixed Reaction

☐ The subject of development of broad medical criteria for use by present evaluation groups or for possible use in an overall accreditation program was met with mixed reaction from some with whom the Council met. These individuals pointed out that there is no need for medical assistance other than that presently available from medical advisory committees and from the Council on Voluntary Health Agencies. It is clear to the Council that it would not be advisable to draw up a uniform system of "clinical yardsticks" as measures against which each medical program carried out by a voluntary health agency would be judged. The Council would not attempt this any more than the AMA would attempt to indicate a single approach to the practice of medicine for the entire country.

Determination of Medical Policy by the Medical Profession

☐ However, the development of broad medical criteria aimed at building an appropriate framework for the promotion of high quality and timely medical programs does appear feasible. These criteria would be aimed at placing the decision-making for medical programs into medical hands. The Council believes, as does the AMA, that the determination of medical policy belongs primarily in the hands of the medical profession. Therefore, the Council has agreed to attempt to develop broad medical criteria of this kind.

The approach to this effort would be oriented to the principles which the Council has already enunciated. Important among these are that physicians should serve on the boards of directors of voluntary health agencies. These physician members should be selected from physicians suggested by or known to be acceptable to the medical society. The medical advisory committees of voluntary health agencies should have representation on the governing boards of the national body and have a voice in the policy formulation.

The further question of whether or not broad medical criteria of this kind should be transmitted to organizations outside the AMA for use in evaluation or accreditation has yet to be resolved, assuming that a sufficient number of medical criteria could be formulated. At this point there are a number of legal questions to be studied before the AMA would take a position concerning the availability of these criteria to other organizations.

Organizations Must Recognize Responsibilities

☐ Since no organization is compelled to engage in an evaluation or accreditation program, it is extremely important that the organization which voluntarily undertakes to serve the public interest through such a program must at all times be cognizant of its responsibilities. There is no doubt in the Council's mind that if an overall accreditation program was instituted and widely known, the loss of accreditation or failure to obtain accreditation would have serious consequences for a voluntary health agency. Activities that might be regarded as serving the selfish interests of special groups or careless administration that results in injury or violation of individual rights must certainly be avoided. The overriding consideration, however, is that in evaluating such factors, we do not weaken the vitality of the voluntary health agency movement.

Good Accreditation Program Offers Several Benefits

☐ The Council is cognizant of benefits which might accrue to many of the health agencies from a well generated program of accreditation. Such a program, carefully developed and fairly administered, embracing all phases of voluntary health agency activities, would greatly enhance the stature of such agencies meeting these standards and would tend to discourage such organizations not meriting the support of the public.

Several other matters came up during the discussion which, while particularly germane to the subject of an overall accreditation program, are areas which are properly primary concerns of other groups, but nevertheless of interest to the Council on Voluntary Health Agencies. These involve questions such as the source of financing of evaluative efforts, organization and administrative questions within voluntary health agencies, and other questions which are not primarily questions which involve medical judgment. This brings the Council to the conclusion that any further effort to be undertaken around the subject of accreditation should be a joint effort. The Council will make available the experience it has gained to any groups which desire to explore further the entire subject of the need, desirability, and feasibility of an overall accreditation program for voluntary health agencies.

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writer-generated indexing display with which a collection of up to 10,000 documents can be searched within minutes including documents falling simultaneously into one to five categories of interest. Although performing many of the same functions as computer-aided search operations of research literature, it is much cheaper since it is made up on a typewriter and reproduced; but it has the added attraction of being quite adaptable to computer-handling techniques if and when the collection grows quite large.

Note: The New York office has supplied the RNIB offices in London with copies of all documents which have been accumulated, including some that have not yet been incorporated into the documentation system. RNIB has agreed to undertake the task of producing revisions of the "catalog" of aids and appliances and AFB has attempted to forward to London any information about aids and appliances that came to its attention even though the material was not yet suitable for consideration in the formal document files.

It appears that in the past four years, IRIS has met its original objectives to the extent that the experimental and developmental activities of the service are well under way and operational functions of a document center could be transferred to a library function. The splendid support given us by the research and academic communities, and the encouragement we have received from many sides, have convinced us that the remaining IRIS activities are valuable, and our experience encourages us to continue them.

Editorial Notes

Old Rainbows Never End

The search for a pot of gold at the end of the rainbow goes on. It is the same old pot of gold mankind has been seeking in our field for centuries—an acceptance of himself as a normal human being in spite of blindness or any other severe physical difference. The shimmeringly beautiful rainbow is a seductive trail to follow—but does it really have an end?

It is undoubtedly true that attitudes toward or about loss of eyesight have undergone changes over several thousand years. Perhaps in another several thousand years more change will occur—but then electronic substitutes for natural vision will have been perfected and there may be no need for attitudes at all. Still, if hearing aids have not yet fully restored one's sense of psychological wholeness, then seeing aids won't either. We may continue for a very long time to require some type of therapy—self-generated or professionally rendered—to do something called "adjust."

The effect that blindness still has upon otherwise intelligent and educated people is fantastic. For example, take a recent radio drama: the plot was that of a man who lost his sight in the Korean war—or perhaps it was Vietnam. An arrogant type of fellow was he—had never loved anybody; was coldly efficient; and, as a newspaper columnist, had relished his own ability to make himself unpopular and hated.

According to the script writer, the injury to his eyes was his own fault. As an officer—the kind often described as pompous—he resented the advice of an accidental foxhole companion. The veteran soldier told him to stay put until air support could get rid of a machine gun that was pinning them down. The officer arrogantly decided to do his own reconnaissance and was hit. He learned in the inevitable hospital plane from the inevitable flying nurse that: a) his eyes had been seriously damaged, and b) the soldier had saved him at the risk of his own life.

To complete the scene, picture the wounded officer at a re-training center which presumbly was Valley Forge or Hines, where, incidentally, there could be some real stories to relate without melodrama. He was depressed, anti-social, unmotivated, bitter, sour, cynical, self-pitying, uncommunicative, unsmiling, unhinged, and all in all, a veritable louse.

Enter the girl. Skip the inevitable process of love beginning to bloom and the rehabilitation that blossomed—except to note that her devotion must be described as of such a self-martyring nature that his blindness makes no difference to her. Of course it also seems necessary that she tell him she is not beautiful—and he must respond she is the most beautiful girl in the world to him. He even becomes a very nice guy, although it isn't clear whether the stimulus was the girl or his new insight, born presumably through loss of sight. Then, abruptly, there is a new eye examination that kindles hope of restorative surgery.

Now comes a scene that brings tears to the eyes. No matter, he tells her, which way the operation comes out—she will always be his only love. No matter, says she to him, about the outcome—she will forever be his helpmate. You guessed it—the operation was a success and everybody lived happily ever after—which makes one wonder what would have happened if the operation had failed.

One might charge that all that is wrong about the foregoing is the story is at best unoriginal and at worst badly written. What bothers us, though, is that it is so replete with clichés and stereotypes. Much of today's alleged knowledge—and certainly most of our prejudices—are based on such things.

Fifteen blind persons recently cooperated in a project that is part of the American Foundation for the Blind's continuing public education activity. These are successful blind people who make up a radio interview series called "The Turning Point." In themselves, the personal stories told by each of the fifteen are interesting and possibly inspiring. If one listens to them all in rapid sequence, however, from the total montage comes one very loud and clear similarity—each has found it his lot to live with the handicap of public attitudes in addition to the comparatively lesser handicap of impaired vision.

The pot-of-gold acceptance clearly is not yet here. It strikes us that the rainbow trail that most of us, whether personally or professionally, have been following is not leading anywhere—or at least not quickly enough. What we need in this field is a new idea—or lots of new ideas. The old old themes are getting more time-worn and hackneyed. Agencies continue to exploit variations on the theme of "help the blind to help themselves." Organizations of blind persons exploit either "help my fellow blind" or "fight for the right to . . . ." We suggest that neither is wearing away basic prejudices and ignorance, but rather cementing the traditional image. It's time human beings be taught their eyes are a part of their anatomy—a very important part that needs care—but when impaired, there remains a man eager to find and capable of finding his own pot of gold.

M.R.B.

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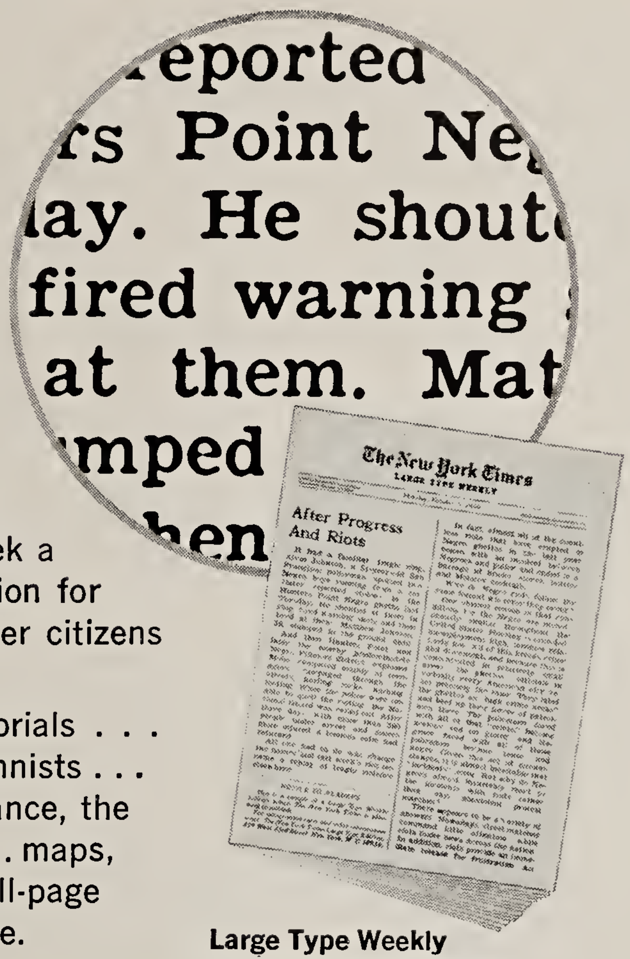

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Report from Washington

The Ninetieth Congress convened on January 10 and began the process of organizing itself into the various committees which consider legislation before it is acted upon by the full House of Representatives or the Senate. In the House, the Democratic members of the Committee on Ways and Means make assignments to the various committees for the Democrats while the same function is performed by a special Committee on Committees for the Republicans. It will be around the middle of March before all committees are fully organized into functioning subcommittees.

During the first several days, some 2,000 bills were introduced in the House of Representatives alone. Needless to say, only a comparative few will be enacted into law before the end of the full two years of the Ninetieth Congress in the fall of 1968. Summaries of bills of particular interest to readers will be carried in succeeding issues.

Since several major pieces of legislation are due to expire on June 30, 1967 and on June 30, 1968, we can anticipate that both the first and second sessions of the Ninetieth Congress will act on bills of great significance to all blind persons.

The Public Welfare Amendments of 1962 with their emphasis on prevention of dependency as well as rehabilitative procedures to reduce welfare rolls must be considered during the first session. Since extension of this law also involves amendments to the Social Security Act, it can be anticipated that the Administration's package will include recommended increases for Social Security beneficiaries, inclusion of disability insurance recipients in the medicare program under Title XVIII, increases in public assistance payments, modifications in the medicaid program under Title XIX for public assistance recipients and the medically indigent, and recommendations for improvements in the Title V programs (maternal-child health, crippled children's, and child welfare services.)

In addition, six major education acts expire on June 30, 1968. It is expected that the Administration will seek extension and improvement of several of these during the first session. Representative Hugh Carey (D., N.Y.) is expected to reintroduce his comprehensive bill providing for Federal aid in the education of handicapped children. Effort will also be made either under Administration or voluntary agency auspices to provide for much needed aid in comprehensive programs for deaf-blind children and adults.

One of the first matters of concern for organizations interested in the education of handicapped children will be to secure adequate financing through a supplemental appropriation for the current fiscal year and through the regular Labor-HEW Appropriation Act for fiscal 1968 to implement the new Title VI of the Elementary and Secondary Education Act providing grants to the states for the education of handicapped children. Similarly, adequate funding of the new grant program for library service to the physically handicapped will be sought for fiscal 1968.

It is also indicated that action will be completed during the current session on legislation to establish a National Eye Institute as part of the National Institutes of Health. The heavy schedule of committees in both the Senate and the House during the last session prevented consideration of this legislation.

The effect of increasing financial demands to pursue the war in Viet Nam will undoubtedly be reflected in smaller Administration requests for appropriations to implement various domestic programs. It is also doubtful that any new domestic programs of great magnitude and cost will be sought by the Administration. It is probable, therefore, that progress in programs for handicapped children and adults will continue to be made on the piecemeal basis which has characterized the development of such legislation over the years, despite Congressional and Administration studies to determine the extent of unmet needs.

I.P.S

NEXT MONTH: The March issue of the *New Outlook* will include articles on evaluation procedures for children with developmental and educational difficulties, and a directory of summer courses in education of visually handicapped children. A guest editorial comments on "Playing the Percentages."

News in Brief

■ The National Accreditation Council for Agencies Serving the Blind and Visually Handicapped began operations on January 3 in its New York offices at 84 Fifth Avenue.

The Council is successor to the Commission on Standards and Accreditation of Agencies Serving the Blind (COMSTAC). Its officers are Arthur L. Brandon, president; Peter J. Salmon, 1st vice president; Benjamin Boyer, 2nd vice president; Frederick G. Storey, secretary; and Ira A. Schur, treasurer. Alexander F. Handel is executive director of the Council.

■ The Vocational Rehabilitation Administration has published a number of fact sheets about its programs. The sheets give information about objectives, types of grant projects, eligibility, and administration. Programs covered include: grants to expand vocational rehabilitation programs; research and demonstration grants; vending stands for blind persons; grants for basic rehabilitation centers; workshops, and facility planning; and grants in support of professional training.

Copies may be obtained from the VRA, Department of Health, Education, and Welfare, Washington, D.C. 20201.

■ Plans for the 1967 meeting of the International Conference of Educators of Blind Youth are "proceeding satisfactorily," according to Dr. Edward J. Waterhouse, chairman of the organization's executive committee.

Dr. Waterhouse has appointed three committees to report to the August meeting. A finance committee, chaired by Stewart Armstrong of Canada, will make suggestions for fulfilling the financial needs of the I.C.E.B.Y. A nominations committee, chaired by Dr. H. Garbe of Germany, will prepare a slate of officers for the years 1967-72. Tore Gissler of Sweden chairs a planning committee to consider invitations from agencies willing to act as hosts for the organization's 1972 meeting.

■ Federal and state approval has been given to a three-year project for training blind persons in cane travel at the Lackawanna branch of the Pennsylvania Association for the Blind. No public or private agency in northeastern Pennsylvania presently offers a community mobility program.

During the project's first year the federal government will pay $16,766 of the $18,629 budget, leaving the balance to be borne by applicants.

Dr. Norman Yoder, state commissioner for the blind, said the total project cost for the three-year period is approximately $54,000, of which the federal share will be $48,544.

■ The new Commission on Accreditation of Rehabilitation Facilities (CARF) has contracted with the Joint Commission of the Accreditation of Hospitals (JCAH) to administer its programs.

■ A twenty-five-minute film demonstrating development of incidental and specific skills in orientation and mobility of blind children has been announced. Titled "From Here To There," it was produced primarily for teacher preparation by Tom Kellis, a resource teacher for visually handicapped students in the Berkeley (California) Unified School District; Philip Hatlen, associate professor of education at San Francisco State College; and Robert Collins, of the Audio Visual Department, Marin County Schools.

For more information about the film write to Philip Hatlen, 1515 Huston Road, Lafayette, California.

■ Milton A. Jahoda, executive director of the Cincinnati Association for the Blind, has accepted appointment to an advisory council serving a training program in sheltered workshop management. The program was recently undertaken by the Department of Management in the School of Business Administration at DePaul University in Chicago.

■ A booklet called *Special Education Services in Sparsely Populated Areas: Guidelines for Research* has been published by the Western Interstate Commission for Higher Education, University East Campus, Boulder, Colorado.

The booklet is a report of the National Research Conference on Special Education Services in Sparsely Populated Areas. June B. Jordan is the editor.

■ A report on the proceedings of the 1964 conference on nine-dot braille is available from the Publications Director at the American Foundation for the Blind. The 100-page booklet costs 50¢.

■ Vernon Metcalf has been appointed to the Community Services Division of the American Foundation for the Blind as regional consultant for the southeastern United States. It is planned that he will be permanently based in Atlanta, Ga. Since 1958, Mr. Metcalf has been with the Rehabilitation for the Blind Unit of the Tennessee State Department of Public Welfare.

■ A program to help blind and visually handicapped hospital residents in New York City has been started by the Jewish Guild for the Blind and Bird S. Coler Hospital of the New York Medical College Center. The Guild will provide rehabilitation services, including mobility training. Coler Hospital will help select patients for rehabilitation.

■ Octave J. Bourgeois, Sr., recipient of numerous awards and citations for service to blind persons, died last December at age 61. A native of Garyville, La., Mr. Bourgeois was an employment counselor for the Louisiana Welfare Department. He was the subject of a thirty-minute color film entitled "The Closed Door Opens."

■ A report on a demonstration project titled "The Value of Mobility Instruction as a Technique to Motivate Blind Individuals" conducted by the Mecklenburg Association for the Blind has been made available. Copies of the 54-page booklet are available from the Mecklenburg Association for the Blind, 704 Louise Avenue, Charlotte, N. C., 28204.

■ *Events*—American Personnel and Guidance Ass'n—Dallas, Texas, March 20-23; American Orthopsychiatric Ass'n—Washington, D.C., March 20-23; Council on Exceptional Children (International Convention)—St. Louis, Missouri, March 26-April 1; National Society for the Prevention of Blindness—Columbus, Ohio, April 12-14; President's Committee on Employment of the Handicapped, Annual Meeting—Washington, D.C., April 27-28; National Braille Ass'n—Philadelphia, Pennsylvania, April 30-May 3; National Conference on Social Welfare—Dallas, Texas, May 21-26; American Library Ass'n and American Ass'n of School Librarians—San Francisco, California, June 25-July 1; American Ass'n of Workers for the Blind—Miami Beach, Florida, July 9-12.

Erratum: Reference citation number 6 in "Employment Status of Handicapped College Graduates" by Alice E. Reed and Louis J. Cantoni, appearing in the November 1966 *New Outlook,* should read as follows: Hetlinger, Duane F.: "Physically Handicapped College Graduates," *The Vocational Guidance Quarterly,* Vol. 11, No. 2, Winter, 1963, 85-87.

Current Literature

Swimming for the Blind, by Gloria R. Seamons. Brigham Young University (Office of University Publications, C-341 ASB, Brigham Young University, Provo, Utah 84601), 1966. 42 p. $1.15. Originally published as a master's thesis, this book deals mainly with the teaching of swimming to blind children. Some of the methods advocated could be adapted for the instruction of blind or partially seeing adults.

Stimulus Redundancy in the Tactile Perception of Histograms, by William Schiff and Herbert Isikow. *The International Journal for the Education of the Blind* (1839 Frankfort Avenue, Louisville, Kentucky 40206), Vol. 16, No. 1, October 1966, p. 1-11. A report on part of a research program aimed at developing effective means of translating textbook diagrams into tactile form for blind students.

The Retention of Information Presented at an Accelerated Word Rate, by Emerson Foulke. *The International Journal for the Education of the Blind* (1839 Frankfort Avenue, Louisville, Kentucky 40206), Vol. 16, No. 1, October 1966, p. 11-15. Report on research performed as part of the Rapid Speech Project at the University of Louisville.

Adjustment to Deaf-Blindness, by Arthur Sculthorpe. *The New Beacon* (Royal National Institute for the Blind, 224 Great Portland Street, London, W1, England), Vol. 50, No. 594, October 1966, p. 256-258. Mr. Sculthorpe, the General Secretary of the National Deaf-Blind Helpers' League, is, himself, deaf and blind. His article, based on a paper submitted to the 18th International Psychological Congress held in Moscow last August, is about the adjustment of persons who become deaf-blind in adult life.

Blind Can 'See' the Shape of Things. *Medical World News* (Medical World Publishing Company, Inc., 777 Third Avenue, New York, N. Y. 10017), Vol. 7, No. 37, October 7, 1966, p. 142-143. Dr. Armando del Campo, professor of psychiatry at National University in Mexico City, has developed an electronic "seeing machine" called the amauroscope. He reports successful trials of the device with blinded individuals who have visual memory. At present the amauroscope is ineffective for persons born blind.

The Selection, Training, and Placement of Blind Computer Programmers, by the Committee on Professional Activities of the Blind of the Association for Computing Machinery in co-operation with the Committee on Automation and Computation of the American Association of Workers for the Blind. July 1966. 45 p. (Available from Theodor D. Sterling, Department of Computer Sciences, Washington University, St. Louis, Missouri, 63130). This booklet is designed to serve as a guide for teachers, employers and rehabilitation workers as well as for blind individuals themselves, interested in computer work opportunities. M.M.R.

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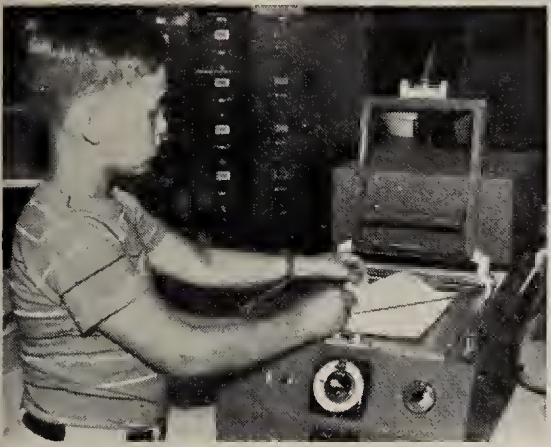

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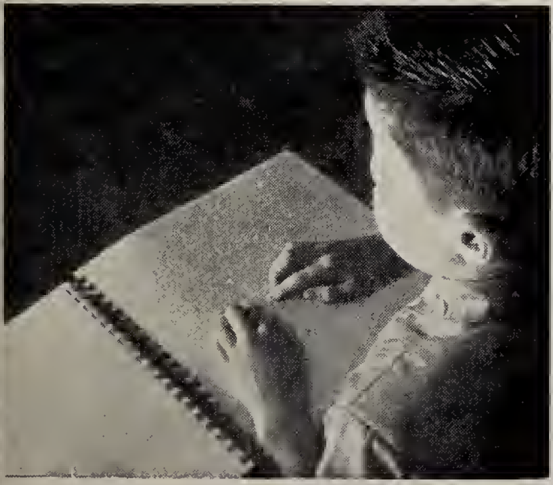

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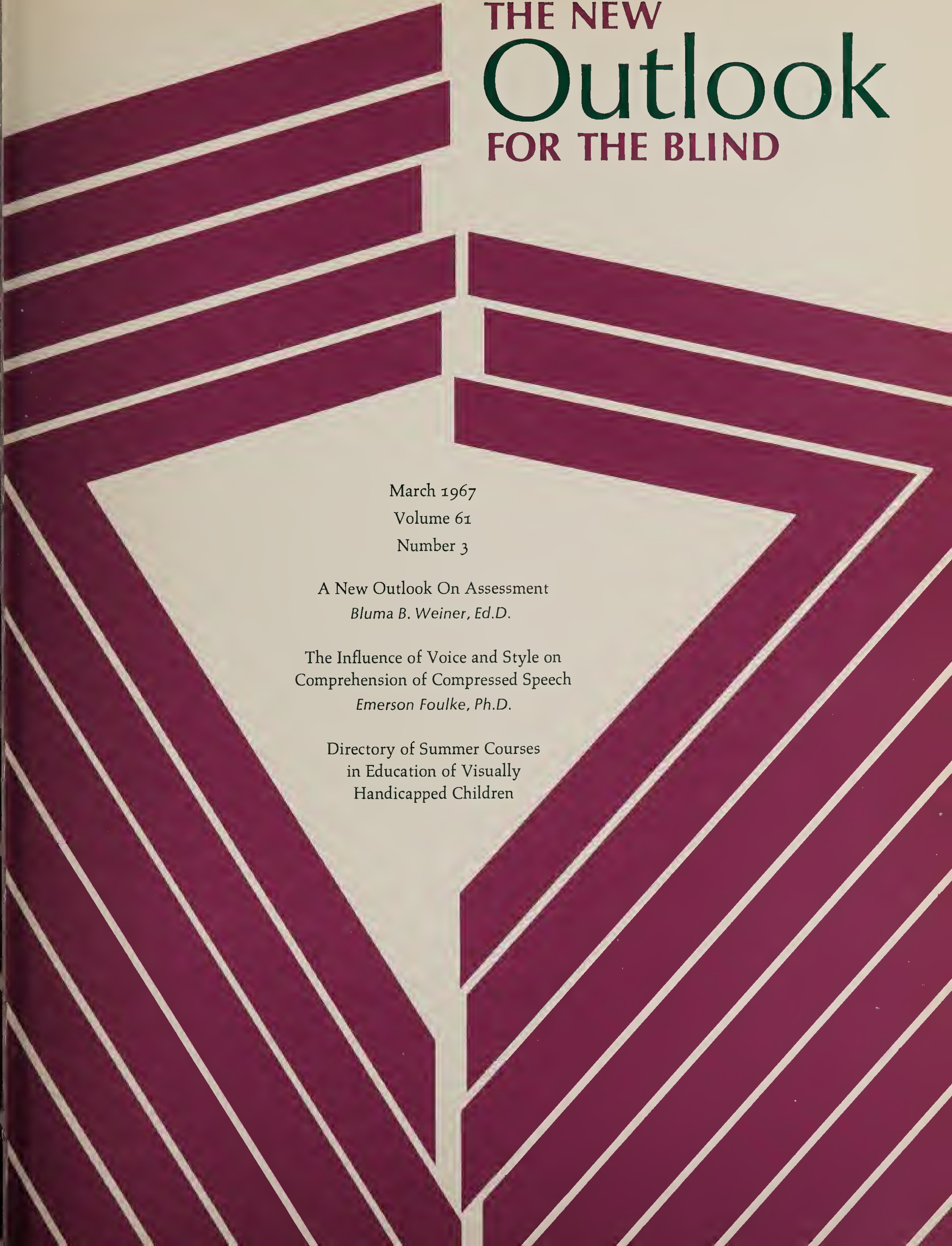

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The Influence of Voice and Style on Comprehension of Compressed Speech
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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

The Influence of a Reader's Voice and Style of Reading on Comprehension of Time-Compressed Speech

EMERSON FOULKE, Ph.D.

Dr. Foulke is with the Department of Psychology and Social Anthropology in the College of Arts and Sciences at the University of Louisville in Kentucky

Recorded speech, the word rate of which has been accelerated, is said to be compressed in time. The easiest way, technically speaking, to produce time-compressed speech is to play a tape or record at a faster speed than the orginal recording speed. This method, however, produces distortion in both vocal pitch and quality that becomes more serious as the amount of time compression is increased.

Speech may also be compressed in time by a sampling method through which brief segments of a recorded tape are periodically discarded and the resulting gaps are closed. This method succeeds because of the redundancy in spoken language and because the discarded segments are so brief that their absence cannot be detected. The sampling method produces accelerated speech that is not altered with respect to vocal pitch or quality.

Because time-compressed speech of intelligible quality is likely to be of considerable interest and value to blind people who read by listening to recordings, a Rapid Speech Project was initiated at the University of Louisville, with the support of the Cooperative Research Branch, to study factors related to the comprehension of time-compressed speech. Most of our research to date has been concerned with speech that has been accelerated by the sampling method. The sampling has been accomplished by a device called the Tempo Regulator.[1]

As those of us working on the project have gained experience in listening to speech at various accelerated word rates, it has seemed to us that the reader's style and his voice quality are factors that may influence the comprehension of accelerated speech. The recorded speech of radio and television announcers, who read at a fairly even rate and with only moderate expression, appeared to remain more intelligible when compressed in time by the Tempo Regulator than the speech of actors, who make an effort to read expressively with considerable variation in word rate, pitch, and timbre. We have also noticed that the particular characteristics of a reader's voice appear to affect the comprehension of accelerated speech.

1. The Tempo Regulator is marketed by the Gotham Audio Corporation, 2 West 46th Street, New York, N.Y. 10036.

The research described here was performed at the University of Louisville as part of the Rapid Speech Project. Financial support for this project was provided by the Cooperative Research Branch, Office of Education, Department of Health, Education, and Welfare. Persons interested in research on time-compressed speech may request assistance in the preparation of time-compressed material from the Rapid Speech Project. For further information write to Emerson Foulke, Department of Psychology, University of Louisville, Louisville, Kentucky, 40208.

It is difficult to talk about variations in voice qualities since our language does not provide familiar words that refer directly to the dimensions of variation that determine voice quality. Nevertheless, that there are wide differences in voice quality, is a common fact of experience. In a general way, voices with a clear, crisp quality appear to fare better at an accelerated word rate than soft voices.

As a first step in exploring these variables, we adopted an experimental plan that took into account both word rate and the combined factor of voice quality and reading style. It would, of course, be desirable to vary voice quality and reading style independently. However, the practical problem involved in accomplishing this would be formidable. For purposes of preliminary investigation we decided to treat the reader's voice quality and his style of reading as a single, though complex, factor.

Design of The Experiment

☐ A two-factor experiment was performed in which word rate was varied in two ways and the oral reading factor in three ways. The selection read by the readers was reproduced at 175 and 300 words per minute (wpm). The selection was read by three different readers, all of whom are employed in the Talking Book Program at the American Printing House for the Blind, Louisville, Kentucky. They have markedly different reading styles and voice qualities. The two males are radio and television newscasters. The voice of one of them has a crisp, clear quality and he reads at a remarkably even rate. The voice of the other male reader is softer and mellower, and his word rate is more variable. The voice quality of the female is, of course, quite different from the voice quality of the two male readers and her reading style might be characterized as more dramatic and hence more variable in rate.

This arrangement resulted in six treatment groups to which subjects were assigned at random. Each subject served in only one treatment group. There were approximately twenty subjects per group.

Subjects Who Participated and Materials Used in the Experiment

☐ One hundred and twenty subjects, of both sexes, were drawn from introductory psychology classes at the University of Louisville. Their participation in the experiment fulfilled a course requirement.

The selection to which subjects listened was "Athenian, Spartan and Roman Life" by Will Durant. It was chosen because, in the opinion of the investigators, it was suitable with respect to interest and level of difficulty for administration to a college sophomore population.

The original, or master tapes, from which the tapes used in the experiment were prepared, were recorded in the Talking Book Studios at the American Printing House for the Blind, Louisville, Kentucky. These master tapes were reproduced on the Tempo Regulator at each of the desired word rates and the output of the Tempo Regulator was copied onto the tapes that were used in the experiment. These tapes were reproduced on a Wollensak Tape Recorder, Model 1500, driving an external Lafayette three-way speaker. The loud speaker output could be heard without difficulty from any point in the experimental room.

Listening comprehension was measured by a test consisting of four alternative multiple choice items. The reliability of this test was not determined in advance. However, an estimate of reliability was based upon the performance of those who served in the experiment. The Pearson R between the halves of the test that resulted from a split on the basis of item difficulty, as corrected by the Spearman-Brown Formula, was .68. It was felt that a coefficient of reliability of .68 was high enough to permit the comparison of group performances required in this experiment.

Procedure

☐ All of the subjects assigned to a given treatment group were assembled in a classroom. The tape recorder was started and the instructions for participation in the experiment were presented. Then, the listening selection for that treatment group was presented. Following the selection, test booklets and answer sheets were distributed and subjects completed the test.

Results of the Testing

☐ Table 1 presents the means and standard deviations of test scores for the six treatment groups. Inspection of this table suggests that both experimental variables had an effect on the outcome of the experiment. The differences between the means for the groups who listened to the selection by the same reader, but had a different word rate, are considerable. The differences among the means for the groups who heard the selection read by different readers, but at the same word rate, are smaller. However, these differences are ordered in the same way at the two word rates. An analysis of variance was performed on the test scores and the results of this analysis are shown in Table 2. The variability in test

TABLE 1

Means and Standard Deviations for the Six Treatment Groups

*Treatment Group**	*Mean*	*Standard Deviation*
I	33.81	5.36
II	30.00	4.65
III	29.81	4.71
IV	24.25	5.40
V	23.09	4.91
VI	21.91	4.33

* Treatment conditions and readers:
Group I = 175 wpm—read by Paul Clark
Group II = 175 wpm—read by Livingston Gilbert
Group III = 175 wpm—read by Terry Hayes Sales (female reader)
Group IV = 300 wpm—read by Paul Clark
Group V = 300 wpm—read by Livingston Gilbert
Group VI = 300 wpm—read by Terry Hayes Sales

TABLE 2

Analysis of Variance of Test Scores

Source of Variation	*Sum of Squares*	*df*	*Mean Square*	*F*	*F (.01)*
Between Word Rates	1928.73	1	1928.73	77.83	6.84
Reader	181.27	2	90.63	3.66*	4.78
Interaction	53.85	2	26.93	1.09	4.78
Within Groups	2875.15	116	24.78		
Total	5039.00	121			

* F (.05) = 3.07

scores that could be attributed to differences in word rate was significant beyond the .01 level, as shown in Row 1 of this table. The variability in test scores associated with the three readers who read the experimental selection was significant at the .05 level, as shown in Row 2. The entries in Row 3 indicate that there was no significant interaction between the reader variable and the word rate variable. In other words, the differences in voice quality and reading style of the three readers employed in the experiment exerted a similar influence on listening comprehension at both the slow and the fast word rate.

Discussion

☐ The outcome of the experiment was sufficiently unequivocal to permit the conclusion that the choice of a reader does make a difference as far as comprehension is concerned. However, it provides no information that would be useful in mediating that choice. Before this can be done, those characteristics of voice quality and reading style that can affect listening comprehension must be identified.

The failure to find an interaction between the word rate of the listening selection and the voice quality and reading style of the reader requires additional comment. It was mentioned earlier that the speech of some readers seemed to remain more comprehensible than others when compressed. If this had proven to be the case in the present experiment, there should have been a significant interaction between the two experimental variables. The differences among the means for the three readers should have been of significantly greater magnitude or conceivably in a different order at 300 wpm than at 175 wpm. This does not appear to have been the case. The readers were responsible for differences, but these differences did not depend upon the word rate at which the selection was reproduced.

The results of the present experiment suggest that, with further research, it may become possible to identify and measure those factors related to the comprehensibility of an oral reader's rendition, and to use this information in reader selection and training. However, the present results do not confirm the expectations expressed earlier that special care should be taken in choosing the reader whose rendition is to be compressed by the sampling method. Apparently, the same factors contribute to comprehension at normal and at accelerated word rates. This conclusion merits only tentative acceptance, since reader variables were not dealt with systematically, and since only three combinations of reader variables were represented in the experiment.

NEXT MONTH: The April issue of *The New Outlook* will include articles on maternal rubella and its implications; developmental patterns of individuals with bilateral congenital anophthalmos; and salaries for occupations in services for the blind. A special editorial section is devoted to *The New Outlook's* Sixtieth Anniversary.

Genetic Counseling With Specific Reference To Visual Problems

ELIZABETH JOLLY, M.D., M.P.H.

Dr. Jolly is chief, Public Health Services, Contra Costa County Health Department, Martinez, California

The increasing significance being given to genetic counseling by agencies and individuals in the health professions is undoubtedly due not to any upsurge in human concern over problems of heritability but rather to the recent almost revolutionary increase in our understanding of basic and clinical genetics.

The truth of it is that man, for whatever pre-Mendelian myths he may have subscribed to, has never been anything less than actively interested in the makings of his own individuality, including those portions of it, good or bad, that were visited upon his children. Only in the last decade, however, have the diverse branches of biologic research begun to provide him with a healthy measure of meaningful answers and practical help. As a matter of fact the mounting rate at which new biologic information is now becoming available limelights an inevitable problem: communication between the finders of facts and those from whom the facts are sought.

Because concern over one's heredity is most likely to be verbalized where a disease or defect is involved, it is the physician to whom one usually turns for genetic information. Unfortunately, with few exceptions, the physician has had little or no training in basic or clinical genetics. Nor will he have until the medical curriculum has been revised to prepare him better for this task. To complicate matters, many of the new findings of clinical genetic significance are not being reported in the journals with which he is familiar but in the literature and the language of the cytogeneticist, the biochemist, and the molecular biologist. And, for the majority of physicians at least, there is not even a handy resource in the community to turn to for consultation on clinical genetic matters.

It was in the belief that the public health agency has an obligation to aid and support the individual physician in this area, if it is going to meet its own responsibilities in this rapidly evolving field, that the Contra Costa County Health Department in California initiated its Genetic Consultation and Counseling Service in 1963. The purpose of this program has been simply to help physicians in handling a greater proportion of the genetic problems and questions that confront them by providing them with information having potential use in counseling, in early case-finding, and in prevention.

Because of the various interpretations sometimes given genetic counseling it may be wise to define the term as it is used in the program. Put simply, it is providing an affected family or individual with any information, limited or

This paper appeared in the Fall 1966 issue of *The Sight-Saving Review*. It was presented at the 1966 Annual Conference of the National Society for the Prevention of Blindness in New York City.

extensive, based on the genetic nature of a given disease or predisposition. For example, the physician who tells his patient that the given affection "tends to run in families" is alerting the patient to a possibly increased risk to others in the family and therefore, whether he labels it so or not, he is giving genetic counsel. By the same token, the patient who voluntarily tells his physician that "no one else in my family ever had this problem" is—whether or not he is aware of it—seeking the kind of information which, however simply put, must be considered by our definition to be bona fide genetic counseling. Under this broad definition the indication for it is an everyday occurrence in most physicians' offices. It is important to point out that such counseling should always be done in a way that allows the family or the individual to make his own decisions in personal matters such as procreation and mate selection.

The services of the Contra Costa program are available to any family in the county on referral of their physician, and, on request of the public health nurse, to families with problems who are health department clients.

A Pedigree Showing Members Through Three Generations

☐ Once referred, the family is visited by a public health nurse for the purpose of obtaining a family pedigree showing all members through at least three generations as well as the presence not only of the disorder in question but of all other chronic or congenital disorders known to have affected any of them. The pedigree is submitted to the department physician who is responsible for the program to be analyzed in conjunction with any available medical reports and the literature. Final interpretation includes, wherever possible, information on how the disease or its predisposition is inherited; who else in the family is at risk; how much of a risk this appears to be; what methods have been described for detecting normal carriers or potential cases; whether or not there are measures for preventing or postponing symptoms in potential cases so detected; and what local resources exist for each course the family may decide to pursue.

Pedigree and Interpretation Are Sent to Referring Physician

☐ A copy of the pedigree and its interpretation are then sent to the referring physician for his use in counseling the family and for whatever medical action he may feel is indicated. In the case of health department clients the interpretation is sent to the physician whom the family normally consults, whether private or clinic, along with a letter explaining the family's concern. The interpretation is also sent to the nurse obtaining the pedigree, who is available on request to reinforce the physician's counsel.

While direct genetic counseling is not routinely provided, the department physician is available to counsel families where there is no personal physician or where the referring physician requests it.

Because the program began as a demonstration project to evaluate the service itself and to acquaint the community's physicians with what it is and offers, health department clients were selected as its first recipients. As a result this group comprises the majority of families studied to date. The majority of private referrals have come from physicians who have received this service in connection with some family in the former group.

To date 337 families have been studied, with index cases representing a wide diversity of chronic and congenital disorders and defects.

Eye Problems with an Expected Distribution

☐ While heritable disorders of the eye characterized by visual loss, excluding simple refractive errors, were noted in the index case or members of his immediate family in about one-fifth of all pedigrees, the types of disorders seen, particularly among index cases, have undoubtedly been influenced by the kinds of health department services offered (e.g. the Crippled Children Program). Suffice it to say that the conditions seen included a wide range of eye problems having a distribution not too far different from that expected in the population at large. These included twenty-six families with primary glaucoma, twenty-five with strabismus, five with congenital cataract, four with familial amblyopia, and one to three each with nystagmus, albinism, coloboma, retinitis pigmentosa, galactosemia, ptosis, congenital glaucoma, and congenital optic atrophy. With equal probability this number of families could have included instances of many other heritable disorders of the eye for no less than 246 pathogenic genes are known to express themselves in ocular abnormalities.

Most Families Represented Conditions Amenable To Therapy

☐ While the fact of treatability of a condition per se enhances the likelihood that an affected family will come to the attention of the health department and be included in the genetic study, it is still worth noting that the majority of families seen represented conditions which are amenable to therapy and that, for at least a proportion of these conditions, optimal results depend upon promptness of diagnosis and treatment.

In light of the pedigree findings, and a known mode of genetic transmission, it has been possible in most of these families to identify which as yet unaffected relatives are at risk for the same disorder and therefore good candidates for medical surveillance as well as preventive measures or early case treatment.

An interesting sidelight of the service to date has been the enthusiastic response of families to the process of pedigree study. Many of them were "amazed" to discover that help can often be given families with inherited disorders and predispositions. Even though the inclusion of many of the families who are health department clients was a result of nurse interest rather than an overt expression of family concern, active cooperation has been the rule. Only two or three families have declined to participate, and many have gone to some length to get additional information for the sake of pedigree completeness.

The high level of family cooperation seems to be motivated by several factors. Not infrequently, for example, families seem to welcome the process as a means of airing anxieties in a situation which is both sympathetically and constructively oriented. Also, participation in a study with research prospects seems to please them. For the vast majority of families the potential for possible information about themselves which may be helpful either to them or their descendants appears to be particularly significant.

The reaction of nurses to the process of pedigree study has been equally encouraging. Pedigree-taking, for example, has been observed by public health nurses to improve their interviewing skills, to increase their understanding of intrafamily relationships, to create opportunities for health education, and to improve their rapport with the total family.

At Least An Impression of Favorable Physician Response

☐ About eighty physicians to date have been sent interpreted pedigree material. Precisely how they use this material and with what results has yet to be measured. Such an evaluation will require not only additional financing but a length of time sufficient to reveal actual changes in the pattern of physician use with continued demonstration. The spontaneous expression of satisfaction from many of the physicians in the community, however, has permitted at least an impression of favorable physician response. The greater frequency of private referrals from physicians who have already received the service than from physicians who have not would also seem to be an indication of program effectiveness. So perhaps are the expressions volunteered by families of satisfaction with the information they have subsequently received from their physicians, and, likewise, the spontaneous reports of new cases found as a result of the study.

Ophthalmologists Have a Special Interest

☐ In Contra Costa County the ophthalmologists have shown a special interest in the genetic approach to eye disorders, particularly glaucoma, and the relatively large number of glaucoma pedigrees seen, representing chiefly private referrals was the result of a joint project which these ophthalmologists initiated and designed, aimed at prevention of glaucoma in the community.

In surveying the gamut of conditions represented by all pedigrees studies to date one cannot escape a final impression not only of the frequency with which disorders affecting vision occur but of the diverse nature of those disorders. One sees, for example, diseases limited to the eye, diseases in which involvement of the eyes is only one of a host of other manifestations, and diseases in which visual loss occurs as a sometimes complication. At one extreme one encounters disorders of vision that are typically congenital; at the other, those that typically affect the end of the life span. One sees disorders demanding immediate diagnosis and treatment as well as those that allow relatively long periods of observation. In short, one sees visual problems, or the potential of such problems, in many different shapes and sizes and forms.

The job of prevention based on the genetic approach cannot be relegated to any one specialty. The ophthalmologist will probably not be aware of the newborn at high risk for buphthalmos if the obstetrician, or the pediatrician, was not himself aware. The prediabetic state, precursor to active diabetes and therefore to all its ocular and other complications, may not be detected by the internist or the general practitioner if he is unaware that close relatives are diabetic and that the predisposition is indeed inherited. Early peripheral visual loss in glaucoma will often be prevented where the family physician considers a positive family history grounds for requesting ophthalmologic consultation.

Sufficient Training in Genetics Will Allow Identification

☐ There is no reason to doubt that new measures of detection and therapy will continue to be developed for an increasing number of genetically determined diseases leading to or associated with loss of vision. There is also little doubt that the physician of the future will ultimately have sufficient training in basic and clinical genetics to allow him to identify on the basis of their genetic probability those individuals most likely to profit from such treatment before the fact of disease. If we are going to achieve this latter state at the same pace that biologic research promises to give us the first, several things need to be done.

Much To Be Done, Much To Be Said For Doing It, A Part For Everyone

☐ First, we must hasten the integration of clinical genetic teaching into the medical school curriculum; and real integration rather than isolated teaching is

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A New Outlook on Assessment

BLUMA B. WEINER, Ed.D.

Dr. Weiner is an associate professor at the Ferkauf Graduate School of Humanities and Social Studies of Yeshiva University in New York City

There has been increasing professional discontent with prevailing evaluation procedures for children with developmental and educational difficulties. Broad social forces as well as advances in technology have given new impetus to the search for better ways to describe and deal with the course of human behavior and learning. Of particular concern to persons who work with children who have disabling conditions is the obligation to observe more carefully and to relate findings more realistically to life needs. The urgency of this problem is especially critical in the case of children with multiple disabilities. Paradoxically, the insights and skills which have been devised by psycho-educational workers in the several traditional areas of disability have not transcended the categorical (perhaps mythical) boundary lines, nor have parallel achievements in child and developmental psychology been adequately applied in the rearing and education of handicapped youngsters. Much thinking, knowledge, and practice might be shared profitably. The discussion here suggests a framework for organizing and directing an attempt at sharing so that the processes of evaluation may be related to educational effort and arbitrary labels may be discarded in favor of individual blueprints for educational engineering.

Some Propositions Offered as Starting Points

☐ Newland (1963) has formulated an explicit and perceptive statement on the difference between "testing" and "assessing" which emphasizes the necessity for collating data rather than simply collecting it. Weiner (1966) has remarked upon some of the fallacies inherent in current clinical and educational practice which should be challenged. The following two propositions are offered as starting points.

First, observations on children are relative to conditions of time, circumstance, and content. Duration and continuity of performance have to be taken into account as well as the setting in which specific behaviors occur or fail to occur and the array of functions that are to be noted. Observation must encompass a large enough segment of representative performance in significant tasks and situations in order to lead to practical judgments and decisions.

Second, the behavior of the adult observer is influential in the quality of observations and judgments which are made. In addition to the many aspects of technical competency, there are less generally recognized considerations, such as the observer's beliefs and biases about child development, the scope of his interest in a particular child or area of disability, the extent of his professional curiosity, and the messages of expectancy which he conveys to the child by intent or otherwise.

The impact of these considerations upon a child's performance and an observer's interpretation of that performance has not yet been fully documented. However, the conditions under which children live and work are accessible to modification, and the problem of adult response may be partly solved by multiple observers. Even though we are not really prepared to control all of these factors, we must recognize them and temper our generalizations accordingly.

The Purpose of Assessment

☐ Although we have been struggling for a long time to devise satisfactory explanations for the terms education, educable, and educability, universally satisfactory definitions have been elusive. Current usage of the concepts educable and trainable as they are applied to mentally retarded children is of limited value and doubtful defensibility. These terms are too dependent upon the conventional use of test scores for classification only, and they perpetuate a specious differentiation. Development and behavior are essentially describable on continuous gradients rather than in dichotomies. An arbitrarily delineated dichotomy is allowable for purposes of formal inquiry, but even so the rules of the "research game" must be understood, and the "players" must observe specifically assigned functions in a precisely constructed field. The application of the classification educable or trainable to other populations of handicapped children does not seem promising. If the notion of educability is to be really serviceable, it must be constructed in such terms as to accommodate a continuum of highly important characteristics which obtain throughout the sequence of development and achievement of all children, characteristics which extend into and throughout adulthood, and which are transformable into behaviors accessible to external influence. A design for such a construct is offered here. It appears to meet the conditions which have been specified and to provide reference points for responsible and relevant observation. It suggests a rather simple way to achieve more complete descriptions of status, to provide foundations for selecting and directing the course of performance, and to make possible a scheme for multidimensional descriptions of areas of realized and realizable functioning. These purposes can be accomplished not only by the invention of new instruments but by the more thoughtful use of those diagnostic tools we already have.

Relevant Dimensions of Educability

☐ The characteristics which we propose to observe, and which we consider as the most relevant dimensions of educability are identified here as *level, rate, range, efficiency*, and *autonomy*. These characteristics reflect the response of the child to the demands made of him in out-of-school as well as in-school activities. They are observable in all stages of development, across the conventional categories of handicaps, and in all social and cultural groups.

By *level* we mean the amount of development or achievement. The idea of level has traditionally been expressed in terms of age or grade equivalents, but it may also be described in terms of degree of difficulty or complexity. For children with special handicapping conditions or learning problems, or both, the latter kind of description is essential. It makes available substantive rather than simple score information, and thus provides clues for planning further experience and instruction.

Rate means the time required to achieve a particular level or a specific amount of gain. We have not fully appreciated the fact that rate may change from task to task and from circumstance to circumstance. The manifest activity rhythms of individual children and their apparent peaks and plateaus of achievement deserve notice. We need to understand that a child's rate of change may depend in some part upon the behavior of the adult, whether teacher, parent, or examiner, as well as upon other external elements. It is a mistake to assume that rate is a fixed and exclusive property or function of innate or internal factors. To make this assumption is to minimize the possibility of improvement.

Range is considered here in its territorial rather than its conventional statistical sense, and in the present scheme represents the content of achievement or, in traditional parlance, the curriculum. As used here, range is the array of learning opportunities that are provided. A central question which we must ask for all handicapped children is "Educable in what functions?" This question is critical in the process of assessment, and we shall return to it for further discussion.

In observing for *efficiency* we have to look for evidence of behavioral adequacy in terms of accuracy or correctness and in terms of availability as it is expressed in economy and speed of performance. Determination of the degree of efficiency in a wide range of socially and educationally meaningful tasks is a better index of educability than an unqualified I.Q. score.

By *autonomy* we mean evidence of independent, self-actualizing behavior. We need to consider not only how children approach and carry out tasks assigned to them, but whether and how they choose, initiate, and execute tasks they have selected for themselves, and whether they experience satisfaction in their activity. It is especially important to know whether handicapped children look at themselves as learners and doers or as non-learners and non-doers. If a child consistently fails to reach out spontaneously to things and persons or to make choices and decisions for himself, or if such behavior seems random or restricted, there is need for more careful observation. Such impressions need to be verified so that appropriate revisions may be planned in the mode, material, or content of his experience.

Curriculum As a Basis For Observation

☐ The word curriculum as used here denotes the scope and implies the sequence of the instructional exposures which are commonly available to children enrolled in school programs from the nursery or "preschool" period through grade six. Ordinarily, school curriculum offerings are indicated as formal subject or content areas such as language arts, social studies, science, mathematics, physical education, art, and music. Historically, clinical evaluation of children has tended to disregard the curriculum as such, except for some concern about cultural loadings, while educational evaluation has concentrated mainly upon acquisition of information in a static context. The potential contribution of curriculum content to the development and to the evaluation of children has seldom been acknowledged outside of a few experimental nursery schools. It deserves wider consideration. In order to clarify the potential relevance of the common school curriculum to the development of children, and to make more explicit some of its possible and desirable applications to the education of handicapped children, a somewhat unorthodox formulation is used here.

Under the headings of communication, behavioral tools, informational agenda, spatial and quantitative understandings and skills, and self-actualization, reference points have been determined for the examination of curriculum content in terms of potential functional equivalence for several aspects of human growth and development. Specifically, attention is drawn to perceptual, motor, conceptual, and emotional and social learning. The present formulation is an invitation to look at and to devise fresh ways of employing stable features of the developmental environment.

Primary Processes in Communication

☐ The usual view of the language arts or communication areas embraces hearing and listening, speaking, reading, writing, and spelling. More elaborate achievements in spoken and written language depend upon their acquisition. But underpinning these foundations are even more primary processes: accurate and stable auditory, visual, tactile, and kinesthetic functions; reception, perception, integration, association, and retention; and dependable motor, visual-motor, and vocal coordinations. Difficulty with any of these processes or functions constitutes potential impediment to achievement in more complex school tasks, not only in the language arts as such, but in many other aspects of the school program. Especially serious and damaging are the obstructions to effective social interaction with parents and peers.

Behavioral Tools for Effective Participation

☐ Nursery and kindergarten teachers have understood for a long time that children have to learn how to become "school children." This observation is particularly applicable to the handicapped child. Certain behaviors must be established for effective participation, and when these responses are not already present at school entrance they should be considered a legitimate part of the curriculum. A young or even preadolescent or older child may need some help in learning the meaning and acquiring the motions of behaviors which are often taken for granted: looking at, listening to, waiting, taking turns, sharing, trying, helping, and working. He may have to be guided by verbalizations, demonstrations, and going-through-the-motions in the development of meaning and reinforcement of positive valence toward such expectancies. Knowing how to behave under certain conditions provides the bases for establishing the inner controls needed to cope with one's labile impulses or low threshold of tolerance for competing attractions. The acquisition of such controls assists the handicapped child, as well as other children, to assume and successfully carry out the role of school child.

The importance of this task should not be underestimated. The role of a school child is fairly well defined and can be understood by normal children as young as three years. Expectations which are established for various maturational levels are reasonably stable and "reasonable." There is a progression in the role functions which is intrinsically rewarding for most children: the child who masters various tasks at one level moves on to the next task, group, room, or grade where he learns to do more complicated and potentially more interesting and more satisfying things. The development of competency in the use of various behavioral tools contributes not only to the effectiveness of achievement in the more traditional aspects of school curriculum, but also to the evolution of purpose or motivation for anticipated tasks.

Important Informational Agenda

☐ All children require some kind of assistance in becoming aware of and in dealing with various natural and social phenomena. These conceptual aspects of experience are important "informational agenda" of nursery, kindergarten, and elementary school years. They are data to be acquired, understood, and incorporated into the expanding knowledge of one's self and of other persons and things. In more conventional terms such information is labelled "social studies" and "science." Handicapped children, like others, need accurate information about many aspects of the physical world and the social groups in which they live. They need to know about visible and tangible things and about matters which are not visible or tangible: about thoughts and feelings, and about relationships between themselves and other persons. Such information is acquired gradually, often laboriously, and sometimes painfully. School is a place where these data may be augmented, corrected, and properly organized. The handicapped child would be at even greater disadvantage if he were uninformed about commonly known events and relationships and acceptable ways of responding to them. Such know-that and know-how is not only a basis for social exchange; it is also a substructure for understanding and being at ease in the world.

Spatial and Quantitative Understandings and Skills

☐ Very careful attention needs to be given to processes which precede rote enumeration and computation. Awareness of one's self as a distinct entity, and of one's body members and digits and facial features has been advanced as necessary for the meaningful acquisition of more formal operations. Perception and discrimination of units, groups, mass, direction, and distance—and their comparative relationships—are the foundations upon which children learn how to locate and manipulate themselves, other persons and objects in space and in time. The many categories of spatial and quantitative percepts and concepts, and the various kinds of symbols for their representation and functions are valid curriculum content, and the processes by which competencies are acquired are facilitated and verified by manual explorations and operations. Certain practical tasks of daily life persist, and they require spatial understanding and skill: rational counting and grouping, locating in space (in, on, under, over, beside, before, behind) reckoning time, and using money. These demands, as well as others of similar character, begin in early childhood and continue throughout life. Provision for systematic, rational instruction and appropriate reinforcement is viewed as an important part of the school curriculum for all children. Methods of instruction, especially for handicapped children, must insure perceptual accuracy, correct terminology, and frequent realistic social application.

Self Realization and Actualization

☐ Many students of human development have been concerned with the infant's initial task of becoming aware of himself as a creature, separate from his surroundings, who is comprised of a variety of parts which stay put together in a dependable way and yet are capable of an exciting and satisfying repertoire of performances. But this achievement is just a prologue to the larger, life-long drama of self realization and "actualization." The handicapped child, like other children, participates in a continuous complexity of behaviors which increase and deepen his perceptions of himself as a person. Jersild (1960) has noted that among the various facets of "self" are perceptual, conceptual, and attitudinal components. Neglect of any of these phenomena in the educational management of a handicapped child would distort our perspective of his problems and of our responsibilities, and would deprive him of a potential asset, a sense of being regarded as a person who is capable of growth and of active engagement in the promotion of that growth. In addition to those aspects of curriculum which have already been mentioned, there are others which offer fruitful opportunities for developing functions that contribute to general fitness, pride and pleasure in mastery, and social interaction. In particular, physical education, arts and crafts, and music have long been recognized not only as pleasant divertissements but as means for involving the "whole" person in powerful activity.

The Unnecessary Limits on Opportunities of Children

☐ This translation of ordinary curriculum offerings into functional components has been presented because of deep concern about the unnecessary limits so often imposed upon the opportunities of children with complex disabilities. The situation becomes especially disturbing when mental retardation is a consideration. Prevailing educational practices in that area of exceptionality are exceedingly heterogeneous and are deeply rooted in historical sentiment, while psychological (or psychometric) practices are beset by negative stereotypes. The parameters which have been suggested—level, rate, range, efficiency, and autonomy—seem to afford a rational basis for observing and encouraging behavioral phenomena which have enduring value to the individual and to society.

Genetic Counseling—*continued from page 72*

needed. There is probably no disease that is not influenced in some way by individual genotype and the teaching of clinical genetics therefore cannot be limited in its application to selected age groups, disease specialities, or isolated departments within medical schools.

Second, we must promote the concept among students of medicine that prevention is every physician's business; that prevention over the long haul, may be the only means at his disposal for maintaining high quality care in the face of ever-increasing demands being made on his time.

Third, we must emphasize to the public that helpful information and prevention are available for many genetically determined ocular diseases; that recognition of a hereditary influence is often the first prerequisite step in the direction of such help; that the family itself can take an active part in prevention simply by keeping its members informed of any problem which, having affected one of them, could affect others.

Last, as an interim measure at least, we must make available to physicians everywhere a reliable source of clinical genetic consultation in the form of ready-to-use practical information, utilizing whatever agency, specialist, facility or other resource is best equipped in the given community to do this job.

In short there is much to be done, there is much to be said for doing it, and there is a part in the doing for almost everyone.

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Research, Development and Evaluation of Sensory Aids for the Blind

JOHN K. DUPRESS

Mr. Dupress is managing director of the Sensory Aids Evaluation and Development Center at the Massachusetts Institute of Technology in Cambridge, Massachusetts

The first attempt to construct a sensory aid for the blind, which would permit access to the printed word, was made by Professor Fournier D'Albe of Cambridge University (England) around 1912. This device, called the Optophone, utilizes a linear array of six photo sensors which are used to scan the letter areas from left to right in a successive series of narrow slits. The machine converts optically sensed information to six tones which are similar to those of part of the register of a Hammond electronic organ. Improved models of the Optophone were constructed during World War II in England.

Although several hundred people have been exposed briefly to training with the Optophone, and a few have had long periods of training, only one person in the world, Miss Mary Jameson of London, has successfully used the device for forty years to read print and typewritten characters. The fact that the Optophone has found so little acceptance among the blind indicates that the human engineering problems in learning and comprehending the output is more important than the technical design.

Further research on other reading machines began during World War II. Most of the work in the United States has been done under the sponsorship of the Prosthetic and Sensory Aids Division of the Veterans Administration. As a result of conferences sponsored by the Veterans Administration, and the deliberations of an advisory committee to the Veterans Administration, reading machines have been classified into three categories.

Direct Translation Machine

☐ The direct translation machine employs a linear row of photo sensors, or a flying spot scanner, to probe the area containing the print. The print area is investigated by a succession of narrow slits and the device converts the optically sensed information to auditory or tactile data. When there is sufficient black in the slit being investigated, the blind person hears a tone or feels a poke probe on the surface of his finger.

The direct translation machine has the following capabilities: relatively simple to build, low in cost, lightweight, compact, portable, and able to handle a wide variety of typewriter and print fonts. In lots of a thousand or more, these machines could be sold to blind individuals or organizations for $500 to $1000 apiece.

The disadvantages of the direct translation machine are that the human being has to do all the processing of the data which, in turn, requires a long learning

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and adaptation time and the reading rates are very slow (usually less than 10 words per minute). Special qualities of motivation, tonal memory, cutaneous imagery or other individual attributes are necessary.

The most advanced form of the direct translation machine is being evaluated now with blind subjects at the American Center for Research in Blindness and Rehabilitation (Newton, Massachusetts). This project is being sponsored by the Veterans Administration. The blind subjects at ACRIBAR have achieved speeds of about 5 wpm, in spite of extremely good engineering design and extensive subject training.

Character of Letter Recognition Devices

☐ A much more complicated approach to the design of reading machines for the blind is the letter or character recognition machine. This machine contains enough internal logic to enable the optically sensed information to be recognized by the machine. The output from this machine may be a spelled letter originally spoken by a human being and retrieved from magnetic storage, or a braille symbol generated by a variety of tactile displays. Most of the work has already been done for the blind subject, so that he need only know how to spell and to make certain adjustments in the machine.

The Veterans Administration is sponsoring a project on letter recognition machines at the Mauch Laboratories, Dayton, Ohio. Researchers at Mauch hope for reading speeds in excess of 60 wpm, with a potential top limit on the speeds of 120 wpm.

Advance research also is underway in the sensory aids group of the Research Laboratory of Electronics at the Massachusetts Institute of Technology. Here, the computer is being used to stimulate the functioning of parts of a reading machine. Through the use of ingeniously contrived algorithms or coded letter feature data, it is theoretically possible to build a character recognition machine for $3000 to $5000, which is better than 97 percent correct and can operate at speeds in excess of 100 wpm.

The principal advantage to the letter recognition machine is that it requires no new learning on the part of the blind subject and adaptation and training time is minimal. Although not as lightweight and compact as the direct translation machine, the letter recognition machine with miniaturized circuitry probably would be as large as a standard electric typewriter. In lots of a thousand, the M.I.T. or Mauch machines probably could be made available at a cost of $3000 to $5000 apiece.

Word Reading Machines

☐ There is a Veterans Administration sponsored project at the Haskins Laboratories (New York) which uses a complex machine to read-out teletypesetter tape and retrieve words spoken by a human being and stored in a magnetic memory. Such a machine is complex and expensive and is intended for a central processing facility only. The cost would exceed $50,000, even if a number of them were constructed.

The main advantage to the word machine is that the data is presented to the blind person a word at a time, similar to the way sighted readers convert the printed book to an audible form for the blind. Although the Haskins machine does not work fast in real-time (less than 20 wpm), it can go on working twenty-four hours a day. The information is stored on magnetic tape which can be played later at a word rate of at least 102 wpm. With electronic time compression, the final output could be as high as 300 to 500 wpm.

The practicality of the word reading machine depends upon efficient handling of compositor's tapes and the acceptance of an audible output which does not have the inflections or other personal qualities of an actual reader.

Since none of the above-mentioned reading machines are in general use, blind people must resort to the alternative methods of braille and sound recording media.

Research and Development to Provide More Braille Material

☐ There is a research and development program underway in the Mechanical Engineering Department at M.I.T. to provide more braille material by means of various braille-belt and line-at-a-time braille displays, a high-speed braille embosser, and computer programs to convert compositor's tapes to grade II braille. The instrumentation and programming have been, and are being, designed to provide access to a great many more books which are stored on typesetting tape.

Computer programming to convert teletypesetter tape to braille is nearing the feasibility stage. A monotype reader is being designed so that textbooks stored on monotype tape can be read into the computer for conversation into braille. Computer programming will permit almost complete automation of compositor's tapes to braille conversion, with a minimum of human intervention, by means of an edit function which is being built into the computer program.

The high-speed embosser represents a possible small scale duplicating facility for braille. In the area of braille, this unit is the equivalent of the electric typewriter for print. The embosser operates at speeds as high as sixteen cells per second, can be fed from continuous rolls of paper, and will operate with a variety of electrical signals from punched paper tape readers and other input sources. Another example of an application for the embosser is its installation in a console at a research computer facility where a blind researcher is able to read-out the information from the computer. It is hoped that the embosser will be useful in other computer facilities, since there is an increasing trend in training and employing blind programmers.

Braille displays are intended to read-out compact and inexpensive storage media for braille other than the actual embossed page. These storage media could consist of punched paper tapes, magnetic tape recordings or optical storage.

431 Lines of Braille Per Minute

☐ To implement the high-speed duplication of braille, the Honeywell Corporation has converted a Honeywell H222 computer printer which generates 431 lines of braille per minute. Although this converted printer is potentially very useful, the rate at which it operates restricts its use to one or more central facilities where a great quantity of braille must be produced rapidly.

Sound Recording Media Are Another Alternative

☐ Sound recording media are another alternative to reading machines. In this case, a sighted human reads printed material into a tape recorder and the tape recordings are duplicated and/or serve as masters for discs which are, in turn, distributed to the blind. The principal research and development projects are sponsored by the Library of Congress in the United States and by the Royal

National Institute for the Blind in England. Both projects employ cartridges or cassettes which protect the tape from damage and facilitate tape handling by the elderly or multiply handicapped. The tape and its container weigh less than one pound for an entire recorded book.

Time-compressed speech is an important development in sound recording media, which is made possible by a computer or electronic apparatus such as the Tempo Regulator, the Fairbanks or the Varivox. The normal reading rate of 175 wpm can be increased to more than 275 wpm for extended periods, and to more than 475 wpm for limited amounts of material. Speeds as high as 995 wpm have been achieved during experiments at Harvard University. Behavioral research on time compressed speech conducted at the University of Louisville, Harvard University, The American Institute for Research, and by the Air Force indicates that speeds of 275 wpm are entirely feasible and speeds in excess of 475 are practical for short periods or for scanning.

Research on Mobility Aids—A Variety of Devices

☐ Research on mobility aids to be used as a supplement to the cane or dog began during World War II. At that time, a number of ultrasonic and sonic devices were constructed as part of a research program sponsored by the Office of Scientific Research and Development. During the past twenty years, a wide variety of ultrasonic, sonic, ambient light, infra-red light and, more recently, laser or laser-like devices have been constructed.

Developments in the aerospace, military and data processing fields have greatly facilitated mobility aids research. Rechargeable batteries, transistors, integrated circuitry, high-efficiency short wave-length transducers, and a number of new auditory and cutaneous displays have been utilized in building devices which offer significant advantages because of their light weight. In many cases, these devices weigh less than one pound.

Among the potentially useful devices now receiving extensive evaluation is the narrow beam ultrasonic mobility aid developed by Dr. Leslie Kay, formerly of Birmingham University (England). The Kay device operates with frequency modulated ultrasonic energy similar to the function of the bat's sonar. It is hand-held and is capable of detecting small objects at distances up to twenty feet, while at the same time providing some additional data concerning the surfaces and geometry of an object. The Russell device, developed by Mr. Lindsay Russell of Cambridge, Massachusetts, is a pulsed ultrasonic unit which weighs less than a pound and can be fitted into a jacket pocket. This device is intended to search the area through which the head and shoulders of the subject will pass (not explored by the cane), at distances up to six feet ahead. A third device is a long cane fitted with three laser-like sensors (gallium arsenide). This project is being carried out at Bionic Instruments, Inc., Bala Cynwyd, Pennsylvania. One sensor provides early warning of terrain changes, the second detects objects up to twenty feet away, and the third alerts the user to obstacles in the area of the head and shoulders.

If the three mobility devices mentioned above, as well as others not mentioned, are to contribute significantly to mobility, they will require more extensive use by the blind, design modifications based upon evaluations, and the development of special training procedures for blind subjects. The role of mobility devices will become more important as the trend towards more travel at all age levels continues to increase.

Limited Research and Development For Partially Sighted

☐ The instrumentation mentioned previously is particularly relevant to blind persons with little or no useful vision, or to those who are totally blind. However, there has been a limited amount of research and development for the partially sighted. The first project for this group specifically designed to give them greater access to printed matter was carried out at Dartmouth College and Perkins School for the Blind during World War II, under the sponsorship of the Office of Scientific Research and Development. Since that time, a great many low vision aids have been developed by ophthalmologists, optometrists, physiological psychologists, and technologists. Dr. Louise Sloan of Baltimore has issued a most impressive compendium of these aids.

Conspicuously absent from existing low vision aids are devices which could assist in the mobility of the partially sighted. There is a wealth of valuable data concerning successful applications of low vision aids for reading, but there has been very little experience with mobility aids under the complex and dynamic conditions encountered in every day pedestrian travel. Optometrists, ophthalmologists and rehabilitation specialists for the partially sighted must undertake applied research and field testing of low vision aids which will permit mobility for those with less than 20/200 vision.

The elderly comprise the majority of our blind and partially sighted population. Deterioration of the remaining sensory channels and processing of information by the brain come with aging. Because of the relative poverty of this group of older people, they are unable to take advantage of even inexpensive sensory aids.

When We Really Know, Then We Can Plan

☐ In England, a survey of the needs of the blind is underway which, for the first time in the history of the field, will provide some definitive data on the real needs, problems, questions and suggestions of the blind population. When we really know what changes occur with blindness and aging, then we can plan for the enhancement of functioning or capability of the blind through the use of technological aids.

Each individual mobility device is intended to help in the solution of one or more of the following sub-tasks: (1) early detection and/or recognition of objects in the intended travel path; (2) detection and/or recognition of objects for orientation and navigation purposes; (3) early warning of terrain changes (step-ups and step-downs); and (4) three-dimensional environmental sensing beyond the reach of the blind person's hand or cane. None of the devices is capable of replacing the cane or the dog, but some of the devices may be very useful supplements to the cane or dog after appropriate training.

The computer is becoming very important in the lives of the blind, and the following are a few important applications: (1) new careers in data processing are opening up for the blind because of newly established training programs; (2) the American Printing House for the Blind now is able to translate English into grade II English braille; (3) a Honeywell Corporation computer line printer has been modified to produce high quality braille at 431 lines per minute; (4) M.I.T. now is able to stimulate the functioning of reading machines, mobility devices and the environment through which a blind traveller passes while using a device; (5) data obtained from the evaluation of mobility devices can be processed more accurately and faster than by human observers; (6) compositor's tapes are being converted to grade II braille and later may be used for generating synthetic speech; and (7) time compression of speech, at rates as high as 1000 wpm for certain material, will improve the reading and comprehension of speech by the blind.

It is anticipated that applications for the computer will increase markedly in the near future.

Employing An Evaluation To Determine Worth of An Aid

☐ The concept of employing an evaluation to determine the worth of a given sensory aid evolved at the Haskins Laboratories during World War II. Good evaluations make this determination objectively and accurately, provide guide lines for improvement of the device, and add to the body of scientific knowledge concerning blind reading and mobility.

Evaluations are generally undertaken by a team comprised of behavioral scientists, technologists and rehabilitation specialists in work for the blind, in order to help determine the funding policies of organizations. However, they are more useful to researchers who look upon them as important sources of information for the design of better sensory aids. In the past, each evaluation has been initiated by a new team but the current trend is toward the establishment of permanent evaluation facilities. Now, evaluations are initiated routinely whenever a reading machine or mobility device has been completed in the laboratory phase.

The totally blind serve as subjects, since most devices are intended for people with no useful vision. In the case of mobility aids, field testing in real life situations is more important than tests conducted under controlled conditions.

Plus A Survey To Determine Real Effectiveness

☐ In addition to evaluation, a survey should be conducted to determine the real effectiveness of sensory aids used by the blind over a long period of time. This is particularly important in the case of low vision mobility aids designed for the partially sighted.

In the final analysis, the proof of the worth of any given sensory aid is the regularity with which a blind person uses it in successfully solving the problems arising from sensory deprivation.

References

1. *Proceedings of the Rotterdam Mobility Research Conference.* New York: American Foundation for the Blind, 1965.
2. *Proceedings of the International Congress on Technology and Blindness* (Vol. I, II, and III). New York: American Foundation for the Blind, 1963.
3. *Reading Machine Conferences* (1 through 6). Veterans Administration, Prosthetics and Sensory Aids Division, 1951-1966.
4. Dr. Louise Sloan and Maria D. Jablonski: "Reading Aids for the Partially Blind," reprint from AMA *Archives of Ophthalmology,* 465-484, September, 1959.
5. *Proceedings of the International Conference on Sensory Devices for the Blind,* St. Dunstan's, London, England, June 13-17, 1966.

Directory of Summer Courses in Education of Visually Handicapped Children - 1967

The following directory of summer courses in education of the blind and visually handicapped is presented for educators in this field. Information about the courses is based on reports sent to the American Foundation for the Blind by colleges and universities. This list cannot be considered complete because other colleges and universities may plan offerings also. Endorsement or approval is not implied by inclusion in this listing.

Interested persons are urged to write early to appropriate schools for detailed information about application procedures, admission requirements, subjects to be covered, class sizes, fees, and the relation of courses to certification requirements.

Many schools have scholarships or stipends available to assist students in attending summer courses. The information in the right-hand column of the list will serve as a guide for persons who may wish to inquire about such financial assistance.

In addition, the American Foundation for the Blind is accepting applications for summer stipends of $200 each. Applicants must be administrators, supervisors or teachers who will be employed full time in educational programs for blind and visually handicapped students for the 1967-68 academic year. Consideration will be given to administrators planning to attend any well planned sequence of courses which will strengthen skills for work with visually handicapped children. The deadline for receipt of completed applications (which must be cleared in advance through an appropriate university) is May 1, 1967. For further information, write to: Huesten Collingwood, director, Personnel and Training Service, American Foundation for the Blind, 15 West 16th Street, New York, N.Y. 10011

This directory was compiled by Huesten Collingwood, director of the Personnel and Training Service, American Foundation for the Blind.

[a] U = Undergraduate
G = Graduate
nr = Not reported

University	*Catalogue Number*	*Title of Course*	*Dates*	*Level*[a]	*Number Credit Hours*	*Tuition Per Hour*	*Scholarships Available*
University of Arizona Paul Starkovich, Assistant Professor Department of Special Education University of Arizona Tucson, Arizona 85721	Ed. 211	Orientation-Mobility	6/9-7/15	U & G	3	$19.00 (fee, $3.00)	yes
	Ed. 213	Education of Visually Handicapped	6/9-7/15	U & G	3	$19.00	yes
	Ed. 397	Teacher-Parent Relations	7/17-8/19	G	3	$19.00	yes

University	*Catalogue Number*	*Title of Course*	*Dates*	*Level*[a]	*Number Credit Hours*	*Tuition Per Hour*	*Scholarships Available*
California State College at Los Angeles Harry V. Wall, Department Chairman Department of Special Education California State College at Los Angeles 5151 State College Drive Los Angeles, California 90032	Ed. 425A	Introduction to Vision	6/19-9/2	U & G	3	$13.25	yes
	Ed. 425B	Psychology, Sociology and Vocational Implications of Blindness	6/19-9/2	U & G	3	$13.25	yes
	Ed. 430	Mobility Instruction for Teachers of the Blind	6/19-9/2	G	4	$13.25	yes
	Ed. 445YZ	Observation in Special Education—Visually Handicapped	6/19-9/2	G	1	$13.25	yes
	Ed. 447	Advanced Mobility Instruction for Teachers of the Blind	6/19-9/2	G	5	$13.25	yes
San Francisco State College Georgie Lee Abel, Professor of Education Department of Special Education San Francisco State College 1600 Holloway San Francisco, California 94132	121.1	Visually Handicapped Child	6/26-8/4	U & G	2	nr	yes
	121.2	Student Teaching Visually Handicapped	6/26-8/4	U & G	2	nr	yes
	121.3	Seminar Visually Handicapped	6/26-8/2	U & G	2	nr	yes
	161.1	Structure and Function of the Eye	6/26-8/4	U & G	2	nr	yes
	161.2	Survey Education Visually Handicapped	6/26-8/4	U & G	2	nr	yes
	161.3	Principles and Methods Partially Seeing	7/17-8/4	U & G	3	nr	yes
	161.4	Beginning Braille	6/26-8/4	U & G	3	nr	yes
	161.5	Advanced Braille	6/26-8/4	U & G	2	nr	yes
	161.6	Methods of Teaching Blind Children	6/26-7/14	U & G	3	nr	yes
	260.6	Advanced Problems Special Education	6/26-8/4	G	2-3	nr	yes
	261.8	Orientation Mobility of Blind Children	6/26-7/14	G	3	nr	yes
	261.9	Visually Handicapped in Secondary Schools	7/17-8/4	G	3	nr	yes
	261.13	Optical Rehabilitation and the Education of the Visually Impaired*	7/17-8/5	nr	nr	nr	nr
Colorado State College Dr. Tony D. Vaughan, Chairman Department of Special Education Colorado State College Greeley, Colorado 80631	SPED 241	Survey of Education of the Visually Handicapped	6/12-8/18	G	3	$6.50, Colorado residents $12.00, out-of-state students	yes

* Students must apply for admission prior to June 1st.

University	*Catalogue Number*	*Title of Course*	*Dates*	*Level*[a]	*Number Credit Hours*	*Tuition Per Hour*	*Scholarships Available*
Colorado State College (Continued)	SPED 243	Beginning Braille	6/12-8/18	G	3	$6.50, Colorado residents $12.00, out-of-state students	yes
	SPED 245	Secondary Methods for the Blind	6/12-8/18	G	3		yes
	SPED 343	Advanced Braille	6/12-8/18	G	3		yes
	SPED 344	Practicum with Visually Handicapped	6/12-8/18	G	6		yes
	SPED 345	Principles of Orientation and Mobility for the Blind	6/12-8/18	G	3		yes
	SPED 346	Multi-Impaired Blind	6/12-8/18	G	3		yes
Southern Connecticut State College Arnold Fassler, Ed.D. Professor and Chairman Department of Special Education Southern Connecticut State College 501 Crescent Street New Haven, Connecticut 06515	SP.Ed. 550	Institute on Vision	6/26-	U & G	1	$20.00	no
Catholic University of America Dr. Max G. Frankel, Director Education of the Exceptional Catholic University of America Washington, D. C. 20017	S628	Education and Care of the Visually Handicapped	6/28-8/4	U & G	2	$65.00	no
	S629	Principles and Procedures in the Education of Partially Seeing Children	6/28-8/4	U & G	2	$65.00	no
	S630	Braille Techniques	6/28-8/4	U & G	2	$65.00	no
Florida State University Dr. Gideon R. Jones, Assistant Professor Department of Special Education and Rehabilitation Florida State University 210 South Woodward Street Talahassee, Florida 32306	ECEn 306	Braille Techniques	6/19-8/11	U	2	Graduate Students—$15.00, Fla. residents $30.00, out-of-state students Undergraduate Students—$12.00, Fla. residents $27.00, out-of-state students	yes
	ECEn 307	Children with Visual Disabilities: Programs and Services	6/19-8/11	U	3		yes
	ECEn 406	Developing School Programs for Exceptional Children	6/19-8/11	U & G	3		yes
	ECEn 408	Methods of Teaching Braille	6/19-8/11	U & G	2		yes
	ECEn 409	Materials and Methods in Teaching Children with Visual Disabilities	6/19-8/11	U & G	3		yes
	ECEn 413V	Problems of Teaching Children with Visual Disabilities	6/19-8/11	U & G	3		yes
	ECEn 445	Math for the Visually Handicapped	6/19-8/11	U & G	3		yes
	ECEn 446	Orientation and Mobility for the Classroom Teacher	6/19-8/11	U & G	3		yes

University	*Catalogue Number*	*Title of Course*	*Dates*	*Level*[a]	*Number Credit Hours*	*Tuition Per Hour*	*Scholarships Available*
Illinois State University Harold R. Phelps, Head Department of Special Education Illinois State University Fairchild Hall Normal, Illinois 61761	Bio. Sci. 382	The Eye—A Laboratory and Clinical Study	6/19-8/11	U & G	2	$9.00 Ill. residents, less than 4 hrs. $23.00 out-of-state students, less than 4 hrs.	yes
	Educ. 350	Education of the Partially Seeing	6/19-8/11	U & G	2		yes
	Educ. 351	Education of the Blind	6/19-8/11	U & G	3		yes
	Educ. 352	Braille I	6/19-8/11	U & G	2		yes
	Educ. 356	Braille II	6/19-8/11	U & G	2		yes
	Educ. 447	Coordinating Educational Programs for Exceptional Children	6/19-8/11	G	2		yes
	Psyc. 346	Psychology of Exceptional Child	6/19-8/11	U & G	2		yes
Northern Illinois University Ramon Kuhns, Coordinator—Education of the Visually Limited Department of Special Education Northern Illinois University Graham Hall DeKalb, Illinois 60115	Sp. Ed. 441	Special Education for Blind Children (Methods)	6/13-8/4	U & G	3	$ 9.00, Ill. residents $33.00, out-of-state students	nr
	Sp. Ed. 443	Orientation and Mobility	8/5-8/24	U & G	3		nr
	Sp. Ed. 444	Advanced Braille	6/13-8/4	U & G	3		nr
University of Kentucky Albert S. Levy, Coordinator of Special Education College of Education University of Kentucky Lexington, Kentucky 40506	558	Modern Educational Problems (Abacus Arithmetic for the Blind)	7/10-7/28	U G	3 3	$37.00 $46.00	no
Boston College John R. Eichorn, Ed.D., Coordinator Department of Special Education and Rehabilitation Boston College 96 College Road Chestnut Hill, Massachusetts 02167	S Ed. 293	Orientation to Work with the Blind	6/26-8/4	G	3	$40.00	no
	S Ed. 385	Orientation and Mobility for Teachers of the Visually Handicapped	6/26-8/4	G	3	$40.00	no
Michigan State University Mrs. Lou Alonso, Coordinator Program for the Visually Handicapped Department of Special Education Michigan State University Room 343, Erickson Hall East Lansing, Michigan 48824	ED 424	Education of Exceptional Children	6/19-7/26	U & G	3	$119.50, fee per term, 12 credits, Mich. residents. $341.50, fee per term, 12 credits, out-of-state students. Part-time fees less.	yes
	ED 430 A Sec. 1	Educational Procedures for the Visually Handicapped	6/19-7/26	U & G	3		yes
	ED 430 A Sec. 2	Educational Provisions for the Blind	6/19-7/26	U & G	3		yes
	ED 430 A Sec. 3	Braille	6/19-7/26	U & G	3		yes

University	*Catalogue Number*	*Title of Course*	*Dates*	*Level*[a]	*Number Credit Hours*	*Tuition Per Hour*	*Scholarships Available*
Michigan State University (Continued)	ED 882	Organization and Administration of Special Education Classes	6/19-7/26	G	3	$119.50, fee per term, 12 credits, Mich. residents. $341.50, fee per term, 12 credits, out-of-state students. Part-time fees less.	yes
	ED 882	Orientation and Mobility Skills for Blind Children	7/31-8/4	U & G	2		no
	—	Workshop in Physiological, Anatomical and Hygienic Aspects of the Eye	7/31-8/13	U & G	3		nr
University of Minnesota Mrs. Glenda Martin, Instructor Department of Special Education University of Minnesota 108 Pattee Hall Minneapolis, Minnesota 55455	Ed CI 115	Introduction to the Education of Visually Handicapped Children	6/12-7/15	G	3	$76.50 per summer session for 6-9 credits	yes
	Ed CI 116	Braille I	6/12-7/15	G	3		yes
	Ed CI 117	Braille II	6/12-7/15	G	3		yes
	Ed CI 118	Education of Visually Handicapped Children	6/12-7/15	G	3		yes
	Ed CI 126	Orientation and Mobility for Blind Children	6/12-7/15	G	3		yes
	Ed CI 178	Structure and Function of the Eye—Educational Implications	6/12-7/15	G	3		yes
Jersey City State College E. Alan Bartholomew, Assistant Professor Department of Special Education Jersey City State College 2039 Kennedy Boulevard Jersey City, New Jersey 07305	10/649	Methods of Teaching Blind and Partially Seeing	6/67-8/67	G	3	$16.00	no
Seton Hall University Thomas P. Mahoney, Assistant Professor and Director Teaching the Handicapped Program Department of Counseling and Special Services Seton Hall University South Orange, New Jersey 07079	SP 300	Introduction to Education of the Handicapped	6/26-8/5	G	3	$32.00	no
	SP 318	Methods of Teaching Braille to the Blind	6/26-8/5	G	3	$32.00	no
	SP 320	Medical, Educational and Social Implications of Blindness	6/26-8/5	G	3	$32.00	no
Dominican College of Blauvelt Sister Jean Marie, O.P., Director of Special Education Department of Education Dominican College of Blauvelt Western Highway Blauvelt, New York 10913	SE302	Programs, Methods and Materials for Teaching the Visually Handicapped	7/5-8/12	U	3	$20.00	yes
	SE303	Braille Reading and Writing	7/5-8/12	U	3	$20.00	yes

University	*Catalogue Number*	*Title of Course*	*Dates*	*Level*[a]	*Number Credit Hours*	*Tuition Per Hour*	*Scholarships Available*
Syracuse University Edward T. Donlon, Administrator Center for the Development of Blind Children Division of Special Education and Rehabilitation Syracuse University 805 South Crouse Avenue Syracuse, New York 13210	Spec. Ed. 250	Education of Visually Handicapped Children (Theory)	6/26-8/4	U	3	$55.00	yes
				G	3	$53.00	yes
	Spec. Ed. 252	Educational Implications of Visual Impairments	6/26-8/4	U	3	$55.00	yes
				G	3	$53.00	yes
	Spec. Ed. 255	Education of Visually Handicapped Children with Multiple Disorders	6/26-7/14	G	3	$53.00	yes
	Spec. Ed. 256	Principles and Methods of Teaching Braille	6/26-8/4	U	3	$55.00	yes
				G	3	$53.00	yes
	Spec. Ed. 257	Principles and Procedures of Teaching the Visually Handicapped	6/26-8/4	U	3	$55.00	yes
				G	3		
	Ed. 260r	Workshop in Communication Skills for the Visually Handicapped	7/17-8/4	G	3	$53.00	yes
Teachers College, Columbia University Dr. Robert A. Bowers, Coordinator of Education for the Visually Handicapped Department of Special Education Teachers College, Columbia University 525 West 120th Street New York, New York 10027	TE4774a	Technology in the Education of the Visually Handicapped (at Massachusetts Institute of Technology)	7/31-8/11	G	2	$55.00	yes
	TE4774s	Institutes in the Education of the Visually Handicapped (Advanced Curriculum and Technological Aids)	7/3-8/11 (6 1-week institutes)	G	1 per week	$55.00	yes
The Ohio State University Loetta L. Hunt, Professor Department of Psychology The Ohio State University 373 Arps Hall 1945 North High Street Columbus, Ohio 43210	Ed. 537L or Ed. 764	Student Field Practicum	6/19-7/26 or 7/27-9/1	U & G	4-6	$7.00	yes
	Ed. 608	Beginning Braille	6/19-7/26	U & G	3	$7.00	yes
	Ed. 609	Advanced Braille	7/27-9/1	U & G	3	$7.00	yes
	Ed. 619	Principles and Methods in the Education of Partially Seeing Children	6/19-7/26	U & G	3	$7.00	yes

University	Catalogue Number	Title of Course	Dates	Level[a]	Number Credit Hours	Tuition Per Hour	Scholarships Available
The Ohio State University (Continued)	Ed. 644	Practicum in Educational Planning for Partially Seeing Children	7/27-9/1	U & G	3	$7.00	yes
	Ed. 730	Educational Implications of Visual Impairments	6/19-7/26	U & G	3	$7.00	yes
	Ed. 732	Theory and Practice in the Education of Blind Children	7/27-9/1	U & G	3	$7.00	yes
	Ed. 736	Education of Multi-handicapped Children	6/19-7/26	U & G	3	$7.00	yes
	Psy. 609	Exceptional Children: General Survey	6/19-7/26	U & G	3	$7.00	yes
Portland State College Madge Leslie, Assistant Professor of Education Department of Education Portland State College Box 751 Portland, Oregon 97207	Ed 407-507	Educational Implications of Vision Problems of Children	6/19-7/28	U & G	3	$14.00	yes
		Introduction to the Education of Visually Handicapped Children	6/19-7/28	U & G	3	$14.00	yes
		Principles and Procedures of Education of Visually Handicapped Children	6/19-7/28	U & G	3	$14.00	yes
		Braille Transcribing	6/19-7/28	U & G	3	$14.00	yes
		The Visually Handicapped Child from Birth to Age Seven	6/19-7/28	U & G	3	$14.00	yes
	Ed 507	Advanced Procedures in Education of Visually Handicapped Children	6/19-7/28	G	3	$14.00	yes
		Effective Living Skills and Orientation Mobility	6/19-7/28	G	3	$14.00	yes
	Ed 509	Practicum: Student Teaching of Visually Handicapped Children	6/19-7/28	G	3	$14.00	yes
	—	INSTITUTE: Cumulative Functional Reporting of Vision of Young Children with Severe Visual Impairment	6/26-7/7	G	3	$14.00	yes
Kutztown State College Mary E. Lovett, Head Department of Special Education Kutztown State College Kutztown, Pennsylvania 19530	SpEd 151	Theory and Technique of Reading and Writing Braille II	6/26-8/4	U	2	$12.50	nr
	SpEd 161	Curriculum and Methods for the Visually Handicapped	6/26-8/4	U	3	$12.50	nr

University	Catalogue Number	Title of Course	Dates	Level[a]	Number Credit Hours	Tuition Per Hour	Scholarships Available
*University of Pittsburgh** Dr. Ralph L. Peabody, Coordinator, Education of the Visually Handicapped Department of Special Education and Rehabilitation University of Pittsburgh 160 North Craig Street Bellefield Building Pittsburgh, Pennsylvania 15220	SE&R 200	Survey of Special Education	nr	G	2	nr	no
	SE&R 210	Anatomy, Physiology and Educational Relevance of Diseases of the Eye	nr	G	3	nr	no
	SE&R 211	Education of the Visually Handicapped	nr	G	2	nr	no
	SE&R 223	Advanced Practicum	nr	G	1	nr	no
	SE&R 226	Survey of the Visually Handicapped	nr	G	3	nr	no
George Peabody College for Teachers Dr. Randall K. Harley, Assistant Professor Department of Special Education George Peabody College for Teachers Box 326 Nashville, Tennessee 37203	S.E. 232	Student Teaching of Visually Handicapped Children	6/21-8/15	U	1-2	$37.50	yes
	S.E. 250	Anatomy, Physiology and Hygiene of the Eye	6/21-8/15	U & G	2	$37.50	yes
	S.E. 251	Educational Procedures for Visually Handicapped Children	6/21-8/15	U & G	2	$37.50	yes
	S.E. 253	Braille Reading and Writing	6/21-8/15	U & G	2	$37.50	yes
	S.E. 254	Braille Teaching Procedures	6/21-8/15	U & G	2	$37.50	yes
	S.E. 255	Orientation and Mobility for Visually Handicapped Children	6/21-8/15	U & G	2	$37.50	yes
	S.E. 351	Advanced Educational Procedures for Visually Handicapped Children	6/21-8/15	G	3	$37.50	yes
	S.E. 352	Field Work in Special Education of the Visually Handicapped	6/21-8/15	G	1-2	$37.50	yes
	S.E. 353	Readings and Research in Special Education of the Visually Handicapped	6/21-8/15	G	1-4	$37.50	yes
University of Houston Alfred H. Moore, Chairman Department of Foundations and Special Areas University of Houston 3801 Cullen Boulevard Houston, Texas 77004	SPE 460	Visual Problems of School Age Children	6/5-7/14	U & G	3	nr	no
	SPE 461	Principles and Methods in Braille	6/5-7/14	U & G	3	nr	no
	SPE 600	Advanced Braille	6/5-7/14	G	3	nr	no
		Internship and Practicum	3-6 wks. to be arranged	G	3-6	nr	no

* The summer school of 1967 will concentrate on the education of the partially seeing child and the summer school of 1968 will be a continuation of 1967 with concentration on the education of the blind child.

University	*Catalogue Number*	*Title of Course*	*Dates*	*Level*[a]	*Number Credit Hours*	*Tuition Per Hour*	*Scholarships Available*
The University of Texas Natalie C. Barraga, Associate Professor, Program Coordinator —Visually Handicapped Department of Special Education The University of Texas Sutton Hall 311 Austin, Texas 78712	Ed.P. 365.3	Preparation of Audio and Visual Materials	7/20-8/29	U	3	$ 25.00, Texas residents, 6 hrs., 6 wks. $100.00, out-of-state students, 6 hrs., 6 wks.	yes
	S Ed. 371.3	Visual Problems of Exceptional Children	6/8-7/18	U & G	3		yes
	S Ed. 379	Seminar in Visually Handicapped	6/8-7/18	U & G	3		yes
	S Ed. 384.1	Problems in Use of Braille Codes	6/8-7/18	G	3		yes
	S Ed. 384.2	Psychological and Social Problems of Visual Disability	7/20-8/29	G	3		yes
	S Ed. 394	Internship in Visual Handicapped	6/8-8/29	G	3		yes
	S Ed. 395	Research in Visual Handicaps	6/8-8/29	G	3		yes
	—	Orientation and Mobility for Teachers (tentative)	7/3-7/21	U & G	Non-credit		yes
Brigham Young University Mrs. Ruth H. Craig, Clinical Instructor in Special Education Department of Teacher Education and Graduate Education Brigham Young University Provo, Utah 84663	Zoology 374	Pathology of the Organs of Vision	6/12-7/14	U	2	Tuition depends on total number of credit hours	nr
	Grad. Ed. 514	Pre-cane Orientation and Mobility Techniques (Workshop)	7/3-7/14	G	2		nr
	Grad. Ed. 562	Advanced Braille	7/17-8/17	G	2		nr
	Grad. Ed. 568C	Observation and Participation with the Visually Handicapped	6/12-7/14	G	2		nr
			or				
			7/17-8/17	G	2		nr
	Grad. Ed. 569C	Practicum with the Visually Handicapped	6/12-7/14	G	2-4		nr
			or				
			7/17-8/17	G	2-4		nr
	Grad. Ed. 663	The Pre-School Visually Handicapped Child (Workshop)	6/19-6/30	G	2		nr
University of Virginia Don L. Walker, Coordinator, Training Program, Visually Impaired Departmental Committee, Education for Exceptional Children University of Virginia Peabody Hall Charlottesville, Virginia 22903	Education 145	Introduction to Visual Impairment	7/3-8/12	U & G	3	$12.00, Va. residents $24.00 Out-of-state students	no
	Education 149	Orientation and Mobility: Principles and Practice	6/12-7/1	U & G	3		no

Editorial Notes

Playing the Percentages

The following guest editorial was prepared by Frank H. Kells, executive director of the Phoenix Center for the Blind in Phoenix, Arizona.

According to Thomas Edison, the achievement of success involves 10 percent inspiration and 90 percent perspiration. Obviously, Mr. Edison realized that popular notion had it the other way around, and he wanted to set the record straight. But people want to believe in the easy way and never give up searching for it.

For example, in terms of overcoming blindness, most people seem to look for instant results, miracle cures, or ready answers. At a recent meeting of a sight conservation group, an officer reported, "Just think what the transplant means to this man—now he can work again."

Of course, the speaker was completely sincere, and what he said was true—up to a point. That point is the subtle inference that without the transplant the man could not have worked and enjoy life. Naturally, if there is any possibility to improve the eyesight of a visually impaired person, this should be done. But if it cannot be done, it is certainly not the end of the road. We know that, but let's not kid ourselves—most people do not. To illustrate, let's play Edison's game.

When it comes to this matter of overcoming blindness, don't you agree that 90 percent of the general public thinks only in terms of restoring sight, while possibly 10 percent really believes that a person with incurable blindness can live a full life? But when you come right down to it, doesn't the real solution for most of the visually impaired population involve 10 percent cure and 90 percent re-adjustment?

And when it comes to re-adjustment don't you agree that most people think in terms of tools rather than skills? A good example is the old controversy over the relative merits of the dog and the cane in mobility. Why are these arguments always so futile? Because when you come right down to it, 90 percent of mobility has absolutely nothing to do with tools. It is the person himself—his mind, his body, and his spirit. Take nine parts human being—motivated, alert, well-oriented—then carefully add one part tool (cane or dog) and you'll probably have mobility. Take the opposite kind of person, and no tool will help.

And when it comes to this matter of help, don't you agree that most people believe a blind person should rely 90 percent on others and 10 percent on himself? But when you come right down to it, isn't self-help 90 percent of the battle?

And when it comes to self-help, don't you agree that most people regard the methods used by an independent blind person as 90 percent special and 10 percent ordinary? They don't realize how much of everyday life doesn't actually require eyesight. Telephones, coins, voices, typewriters, banisters, curbs and countless ordinary things are made-to-order. So maybe some are used differently or modified? So maybe you have to try a little harder? So what? When you come right down to it, most of what a capable blind person does is not really so special—about 90 percent, wouldn't you say?

And when it comes to those special problems, don't you agree that most blind people blame them on their blindness? The blind fellow who was a second-grade drop-out 25 years ago can't find a job—because he is blind. The 85-year-old blind lady with arthritis and poor hearing is lonely and inactive—because she is blind. And how sad about that poor blind beggar downtown—but then, he can't be blamed for the accident that took away his sight. We've all heard this kind of thing over and over, but when you come right down to it, 90 percent of a blind person's troubles are not caused by his lack of normal eyesight, contrary to five thousand years of tradition. Show me a well-functioning blind person and I'll show you someone who has learned this lesson.

And when it comes to learning lessons, don't you agree that most people have yet to learn that every blind person is a different individual? The greatest obstacle to his acceptance by employers, colleagues, friends, family, and the public is that reactions and attitudes are based 10 percent on actual fact and 90 percent on conditioned imagination. They see the blind person 10 percent as the individual he is, and 90 percent in terms of stereotype.

And when it comes to this problem of stereotyped attitudes, don't you agree that 90 percent of the responsibility must be accepted by the blind? By our inconsistencies—the sum total of our errors through the ages—haven't we provided about 90 percent of the ammunition? In any case, when it comes to doing something about it, we simply can't expect other people to do more than 10 percent of the work. When you come right down to it, we who are blind will have to come through with the other 90 percent!

It will take 10 percent words and 90 percent actions; it will take 10 percent wishing and 90 percent working; 10 percent theorizing and 90 percent determination; 10 percent special privilege and 90 percent open competition; 10 percent demanding and 90 percent earning; Yes, Mr. Edison, it will take 10 percent inspiration and 90 percent perspiration. F. H. K.

News in Brief

■ A blind industrial psychologist and an almost totally blind White House Fellow are among the ten outstanding young men in America, according to the United States Jaycees.

John L. Putnam, 27, is an industrial psychologist with SPACO, Inc. and an ex-college professor. He has conducted experiments in audial perception and job placement for the blind, and delivers more than 200 speeches a year.

Sanford Greenberg, 26, holds a Ph.D. and is on a one-year program assisting the President's science advisor. The founder of his own international research company, he has invented a device for compressed speech enabling the ear to take in 1000 words a minute. He is currently working on an oral typewriter.

Eight other young Americans, all under age 35, were honored by the Jaycees at an awards congress at Jekyll Island, Georgia, on January 13 and 14.

■ A new on-the-job training agreement between the Association of Rehabilitation Centers and the Bureau of Apprenticeship and Training was recently announced by Secretary of Labor Willard Wirtz. The agreement calls for the employment and training of 900 unemployed and disadvantaged persons in supportive occupations among rehabilitation facilities throughout the United States.

Over $600,000 has been directed for subcontract funds to participating facilities. Provision has been made for training to be coupled with classroom instruction.

Training will last from 8 to 26 weeks. Occupations include physical therapy aide, occupational therapy aide, child care aide, psychiatric aide, rehabilitation nurses aide, professional services aide (speech therapy, psychology, social services) and related occupations.

■ An area-wide accreditation program for diabetic clinics designed to create uniform standards for patient care has been started by the New York Diabetes Association.

Criteria and qualifications for diabetes clinics were established by a group of physicians assembled by the council of the association's clinical society.

Dr. Max Ellenberg, chairman of a committee under which the project was first planned, stated that the multidisciplined approach required under the terms of accreditation will help ensure genuinely total clinical care of the diabetic.

The use of standard methods of history-making and recording of physical and laboratory findings is expected to provide a valuable source of information.

■ U. S. Representative John E. Fogarty (D-R. I.), a longtime champion of federal support for public health projects, died suddenly on January 10. He was about to be sworn in for his 14th term of office.

Since 1949, Representative Fogarty had been chairman of the House Subcommittee on Labor, Health, Education and Welfare. He was widely recognized for his sponsorship of federal spending for medical research and aid to the mentally retarded, and was a recipient of many honors including the Distinguished Service Award of the American Cancer Society, a special Lasker Award for extraordinary public service, and the National Rehabilitation Association's annual award.

Representative Fogarty was first elected to office in 1941.

■ The Veterans Administration has inaugurated a shortcut to speed job opportunities for seriously disabled servicemen. For the first time since the Korean conflict, VA representatives are visiting military hospitals on a regular basis to seek out servicemen and advise them on VA rehabilitation programs. Under usual procedures, VA assistance is offered after the individual is discharged from service and requests aid as a veteran.

■ Bruno Bianco, director of the business and office management department of the American Foundation for the Blind, died on January 29 after a brief illness. Mr. Bianco, 46, had been with AFB since February 1952.

Born in Taunton, Mass., he lived at Norwood, N.J. He was a veteran of World War II and a graduate of Pace College, New York. Mr. Bianco is survived by his wife, his mother, a sister, two daughters and two sons.

■ Frank R. Johnson has been named executive director of the Minneapolis Society for the Blind, succeeding Byron M. Smith who has been appointed director of special projects.

Mr. Johnson served as executive director of the St. Paul Rehabilitation Center and had been associate director of the Minneapolis Society for the Blind for the past six years.

■ The Royal Commonwealth Society for the Blind has moved its headquarters into larger offices. The Society's new address is 39 Victoria Street, London, S.W.1., England.

■ The American Foundation for Overseas Blind has announced the appointment of Ellis Turner as a rehabilitation consultant.

He will join a team of consultants conducting training courses in Kuala Lumpur, Malaysia, for workers from throughout the Far East. Mr. Turner was formerly associated with the International Labor Organization in India, where he worked in rehabilitation and vocational training of the blind.

AFOB has also announced the return of Alex H. Townsend from his post as director of the organization's European Regional Office. Mr. Townsend will serve as program consultant at the Foundation's world headquarters in New York City.

■ S. Julian Boyles, a former United States Army colonel, has been selected general manager of Industries for the Blind in Winston-Salem, North Carolina. He succeeds Raymond L. Vanhoy, who has joined Goodwill Industries.

Coming Events

March 20-23 American Personnel and Guidance Association, Dallas

March 20-23 American Orthopsychiatric Association, Washington, D.C.

March 26-April 1 Council on Exceptional Children, St. Louis

April 12-14 National Society for the Prevention of Blindness, Columbus, Ohio

April 27-28 President's Committee on Employment of the Handicapped, Annual Meeting, Washington, D.C.

Erratum: The subheading "Major Results and Implications" in an article titled "School Peers of Visually Handicapped Children" by Luciana Visentini Steinzor, contained in the December 1966 *New Outlook,* should appear in italic typeface.

Current Literature

Estimated Statistics on Blindness and Vision Problems. (NSPB Fact Book) National Society for the Prevention of Blindness, Inc. (16 East 40th Street, New York, N. Y. 10016), 1966. 109 p. $1.00. Current trend data on blindness and vision problems, the focus being upon the estimated number and characteristics of the legally blind in the United States. Brief discussions of the procedures used in arriving at estimates and the significance and limitation of the results are included to prevent possible misuse or misinterpretation.

. . . And Sensory Aids, by Eugene F. Murphy. *Bulletin of Prosthetics Research* (Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402), BPR 10-5, Spring 1966, p. 1-7. 65¢. The author, Chief of the Research and Development Division of the Prosthetics and Sensory Aids Service of the Veterans Administration, introduces and gives background material pertinent to the several papers in this issue of the Bulletin relating to reading machines for the blind.

The Sixth Technical Conference on Reading Machines for the Blind, by Howard Freiberger. *Bulletin of Prosthetics Research* (see above for printer and price), BPR 10-5, Spring 1966, p. 8-24. Highlights of the conference held in January of 1966 in Washington, D. C. The agenda included single-channel devices, direct translation machines, intermediate machines, recognition machines, output/display systems, other systems of reading for the blind, use of telephone network and visual effects through stimulation of remaining parts of the visual system.

The Optophone: Its Beginning and Development, by Mary Jameson. *Bulletin of Prosthetics Research* (see above for printer and price), BPR 10-5, Spring 1966, p. 25-28. Miss Jameson, for many years associated with the research program at St. Dunstan's, has used the optophone for fifty years. This article is a transcription of a recording presented at the Sixth Technical Conference on Reading Machines for the Blind.

Factors Affecting Reading Machine Instruction in Rehabilitation Centers, by Loyal E. Apple. *Bulletin of Prosthetics Research* (see above for printer and price), BPR 10-5, Spring 1966, p. 29-31. Mr. Apple is Chief of the Central Rehabilitation Section for Visually Impaired and Blinded Veterans, Veterans Administration Hospital at Hines, Illinois. His paper was presented at the Sixth Technical Conference on Reading Machines for the Blind.

Potential Uses of the Optophone, by Harvey L. Lauer. *Bulletin of Prosthetics Research* (see above for printer and price), BPR 10-5, Spring 1966, p. 32-36. Mr. Lauer, who teaches braille to blind and visually impaired veterans at Hines Hospital in Illinois, reports on his personal use of the Battelle probe and the Mauch Laboratories' Visotoner. His paper was presented at the Sixth Technical Conference on Reading Machines for the Blind.

Problems in Machine Conversion of Print to 'Speech', by Jane H. Gaitenby. *Bulletin of Prosthetics Research* (see above for printer and price), BPR 10-5, Spring 1966, p. 37-44. Miss Gaitenby, of Haskins Laboratories, presented this paper to the XIth Annual National Conference on Linguistics sponsored by the Linguistic Circle of New York, March 12, 1966.

Recommended Aids for the Partially Sighted, by Louise L. Sloan. National Society for the Prevention of Blindness, Inc. (16 East 40th Street, New York, N. Y. 10016), 1966. 36 p. $1.00. A catalogue based on data obtained in a ten-year research study.

M. M. R.

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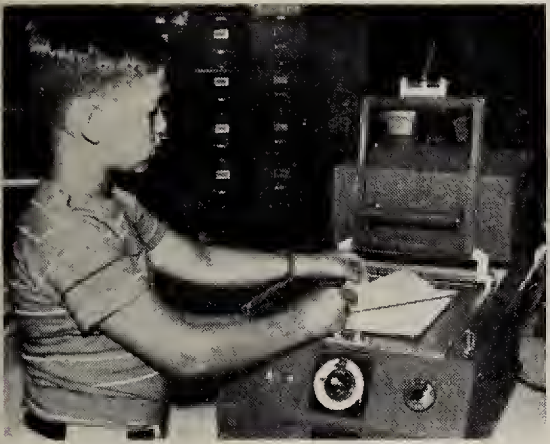

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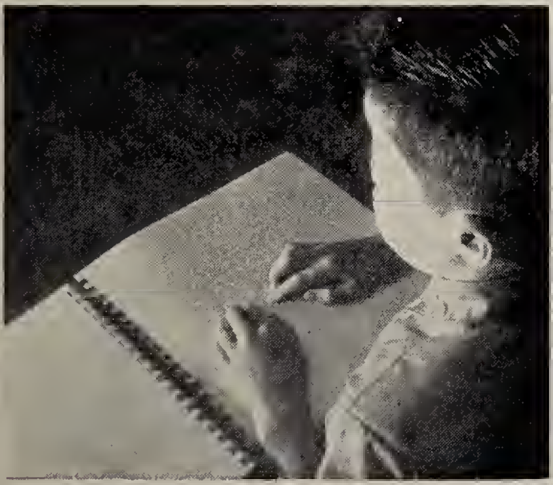

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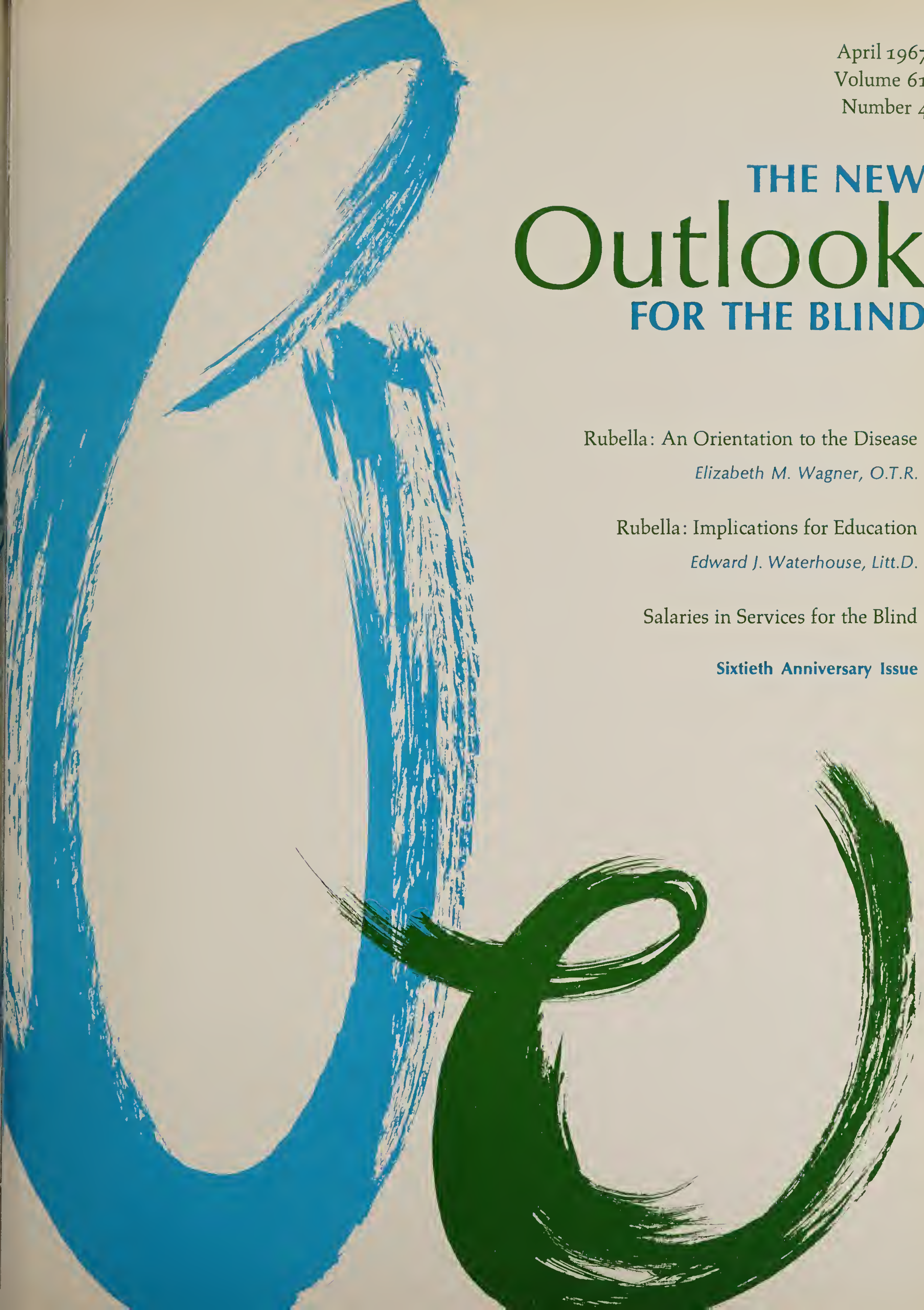

Rubella: An Orientation to the Disease
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Salaries in Services for the Blind

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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

Maternal Rubella:
A General Orientation to the Disease

ELIZABETH M. WAGNER, O.T.R.

Mrs. Wagner has worked for over fifteen years in the rehabilitation of multiply handicapped children. She is currently a specialist in services for deaf-blind children at the American Foundation for the Blind

For a century after it was identified, German measles was considered a mild, harmless illness, which caused more inconvenience than grief. Like his forefathers, the man in the street "thought it of no moment if he thought of it at all." A generation ago however, this casual attitude was brought to an abrupt end by the discovery that when a woman contracted German measles in the early stages of pregnancy, her unborn baby could be severely damaged. Recently, we have also learned that what is a short acute disease in the mother becomes a long drawn-out chronic disease in the infant, and that the infant can infect others. This new insight has forced us to take another look at some of our old concepts about German measles in order to realign facts, theories, and still unanswered questions.

Today, an all-out effort is being made to put an end to German measles. Even if such a goal is achieved fairly soon, the havoc already caused by recent epidemics will remain with us in the form of scores of children, with defective vision or other physical and mental impairments, who will require many types of service for years to come. To provide this help, persons who work in the field of the handicapped will find it necessary to keep up with the developments in diagnosis, medical management, and ultimate prevention of this significant disease.

First described in English in 1815, German measles has been known under many different names. Among these, such terms as "three-day measles" and "bastard measles" have sought to differentiate it from the common measles familiar to most people. In Germany, where there was a series of epidemics in the early eighteen hundreds, it was called "rötheln" derived from the word for redness. In 1866, finding the German word difficult for English-speaking people, a British physician in India originated the term "rubella," perhaps thinking to describe a pretty little disease with a pink rash in contradistinction to "rubeola," the medical term for measles, characterized by its angry-looking red rash. Now, the United States Public Health Service Measles Surveillance Program is using the term "eight-day measles" for rubeola and "three-day measles" for rubella, providing a clear contrast between the two actually dissimilar diseases.

Measles (Rubeola)—A Vaccine Licensed in 1963

☐ Measles is an acute, infectious, contagious, virus disease of moderate severity and consistent characteristics. Its major symptoms are a typical rash, high fever, and nasal catarrh. Complications such as ear infections, mastoiditis, and pneumonia are infrequent, though they may be serious when they do occur. Conjunctivitis may be present, and in extremely rare cases may lead to corneal ulceration. Encephalitis sometimes follows measles, but fortunately this is very uncommon. Fatalities are rare if adequate medical care is provided.

Although thought of as a childhood disease, measles also strikes adults and even old people who have somehow escaped it. Infection spreads by direct contact from person to person, or via the airborne route among those who are susceptible when they are living close together in a group, as in a boarding school or military installation. When a person has measles, the disease runs its course and provides him with a lifelong immunity. This same person will never be susceptible again, nor can he transmit the disease to others after he has recovered.

Until lately, measles could not be prevented, and the damaging effects could only be reduced by judicious use of immune serum to lessen the severity of the disease, and by proper medical care of all patients. However, during recent years, the virus has been isolated, and vaccines have been developed and field tested. Measles vaccine was licensed in March of 1963. It is recommended that it be given to children after they reach the end of their first year, preferably between twelve and eighteen months of age. Where this has not been done, susceptible children (those who have not had measles by this time) should receive the vaccine when entering nursery school, kindergarten, or the lower grades—wherever they will first come together in a group.

The End of One Disease Is in Sight

☐ Measles occurs in a fairly regular epidemic cycle of two to four years. It has been nationally reportable to the United States Public Health Service for the past fifty-four years. Now, at last, the end of this disease is in sight. Through proper surveillance, epidemic control, and effective immunization programs, it is believed that we shall see the eradication of measles from the United States this year.

No such optimism is entertained for the immediate elimination of rubella. Newly developed diagnostic techniques can now prevent needless worry by pregnant women who have had it whether they knew it or not, but the disease and its aftermath will probably be with us for several more years. Current efforts to produce and field test vaccines are moving along actively, but the best we can hope for is that preventive methods will be perfected before the next major epidemic comes around, four or five years from now.

Rubella becomes a serious medical problem only when it strikes a woman in the first trimester of pregnancy and infects her unborn child. In order to make the implications of maternal rubella clear, it may be well to think of the two aspects of rubella as separate entities. One is the classic disease that may hit anyone, man, woman or child. The other is congenital rubella—the chronic infection of the newborn who has been exposed to the rubella virus during the early part of the prenatal period. The two manifestations are different in many ways. Much is already known about rubella; much still remains to be learned about maternal rubella and its effects.

German Measles (Rubella)—The Symptoms Are Not Universal

☐ Rubella is an acute, mild, infectious, communicable disease caused by a virus. It is seldom followed by complications, but those that have been noted in recent epidemics include mild joint pains and a bleeding tendency evidenced by dark blotches on the skin. The serious complication of encephalitis is extremely rare. Though considered a disease of childhood, rubella occurs with frequency in adolescents and adults, where it may take a more severe form than in children. Rubella is a self-limited disease; it runs its course and the patient recovers. It will not strike that same person again. One attack is followed by permanent immunity.

The classical symptoms of rubella are swollen, painful glands in the neck, followed by a pink rash of one to four days duration and some low grade fever. Headache, cough, sore throat, inflammation of the eyes, and a general feeling of ill-health may accompany these signs, especially in adults. It should be understood, however, that these evidences of illness are by no means universal. Even when they do appear, the rubella rash may mimic that of other viral diseases or allergies, thus creating confusion. Up to the time that the virus was isolated (1961) and diagnosis finally became possible in the laboratory, one of the major characteristics of rubella was its difficulty of diagnosis. In some patients, it has been hard to distinguish rubella from scarlet fever, infectious mononucleosis, or from measles. In other cases, there were not enough symptoms present to demand attention, and the disease has gone unnoticed. Rubella may exhibit itself in any one of three different ways: in clinical form showing classic symptoms; in sub-clinical form showing minor or no symptoms; and in atypical forms which have often in the past led to mis-diagnosis.

It has been estimated that approximately 75 percent of the adult population has had rubella. The virus enters most often through the nose or throat, spread by droplet spray from the nose and throat of the infected individual. A single brief contact with a case of rubella is relatively ineffective in spreading the infection, but where there is a concentration of individuals living in close proximity, the infection rate may reach 85-100 percent of those susceptible.

The incubation rate for rubella is unusually long. Two to three weeks elapse following exposure before any symptoms occur, and during the latter part of this period a person is capable of spreading the disease. The virus may be present in his throat or blood up to a week before the rash appears; he can therefore be a source of infection to others even before realizing that he is sick. The virus disappears from the blood a day or so after the onset of the rash, but persists in the throat for as much as two weeks or more. The disease remains contagious all this time.

Maternal Rubella—Doctor Gregg and Congenital Anomolies

☐ In 1941, following an extensive epidemic of rubella in wartime Australia, Sir Norman McAlister Gregg, an Australian ophthalmologist, noticed an exceptionally large number of new cases of congenital cataracts and other anomolies among his pediatric patients. Accustomed to seeing a few such babies in any one year, at that time he tallied seventy-eight of them. Checking back to see where he could find a common factor that would account for this phenomenon, he discovered that at least sixty-eight of these babies were born to mothers known to have had German measles (rubella) in the early months of pregnancy. By this brilliant observation, new areas of concern were opened—not only medical, but also educational and socio-economic.

Further study showed that in addition to eye defects, many of the babies also had heart conditions and impaired hearing. This combination of abnormalities was so common among the group that the term "rubella syndrome" gradually came into use to describe the picture of the multiple handicap produced by this congenital disease.

The Teratogenicity of Maternal Rubella

☐ In the medical literature on rubella, certain words appear regularly. One of these is "teratology," which may be defined as the scientific study of biological malformations. This is a term used frequently when discussing the potentially harmful effects of a drug or virus on a fetus. The teratogenicity of maternal rubella, of course, is what makes it so important. The scope and magnitude of the problem is just beginning to be recognized.

When the first reports were published in the early 1940's, it was assumed that 80-90 percent of the infants exposed to the rubella virus during the first trimester would be damaged. However, as more of these babies were identified and studied, the expectations, though grim enough, proved not to be so dark as had originally been supposed.

Although some of these babies are lost through spontaneous miscarriage, or are stillborn, or die soon after birth, among those who do survive we can expect to find a wide range of consequences. Some babies are severely damaged, some are mildly affected, and some are apparently entirely normal. Certain infants seem to resist the insult of the virus at whatever stage they are exposed to it. However, it is generally agreed that the earlier maternal rubella occurs, the greater the possibility of one or more severe and extensive congenital abnormalities.

Numerous Studies on Rubella and Its Effects

☐ Without procedures for laboratory confirmation of the diagnosis, it has been hard to arrive at accurate estimates of the hazard to the child (the "fetal risk"). Since 1941, there have been numerous studies on maternal rubella and its teratogenic effects. At first these studies were retrospective. The examiners gathered information about mothers and babies where rubella was present or suspected. It soon became apparent that prospective studies were needed to see the overall picture, and research was therefore set up in which the starting point was a group of pregnant women.

From these studies the following statistics have been widely disseminated: rubella occurring in the first month of pregnancy, 10-50 percent risk; in the second month, 14-25 percent fetal risk; and in the third month 6-17 percent fetal risk. This gives a figure of 15-20 percent possibility of some degree of damage to the baby if the mother has rubella at any time during the first trimester. Because of additional information acquired in recent epidemics, many authorities now believe these estimates are too low.

After the first trimester, danger from maternal rubella appears to be remote, although this may be too sanguine a conclusion. There is general agreement that injury to the hearing may continue well into the second trimester. Furthermore, the whole question of the continuing effect of the virus on the infant's intellectual, emotional, and perceptual make-up and development still needs to be studied extensively.

Gamma Globulin Has Been Administered to Susceptible Women

☐ Since there is no specific treatment for rubella, and no vaccine is yet available, gamma globulin, that portion of human blood serum which contains antibodies, has been administered to susceptible women exposed to the disease in early pregnancy in an effort to prevent either the infection altogether or to protect the baby from its ill effects. Pooled gamma globulin taken from a cross section of donors contains significant amounts of antibody, the blood fraction that neutralizes the virus and renders it harmless.

A number of studies have been conducted by different medical groups to determine the validity of this procedure, but the results have not been definitive. So far, there is no proof that any kind of gamma globulin prevents an attack of rubella, although it may decrease the degree and duration of the infection. Further long-range studies are needed to provide conclusive evidence concerning the effectiveness of gamma globulin in preventing congenital rubella and its associated physical and mental defects.

When a baby is born, he carries in his blood stream a variety of antibodies inherited from his mother. If she has had rubella, perhaps in childhood, her rubella-neutralizing antibodies pass to her unborn child and make him immune to rubella for about six months after birth. When this maternal immunity wears off, he will be susceptible to the rubella virus until such time as he contracts the disease himself and develops his own antibodies, which will then protect him from a recurrence of the disease for the rest of his life.

Research on Maternal Rubella During the 1960's

☐ Having previously developed techniques to make the virus grow in tissue culture, researchers in the early 1960's isolated and identified the rubella virus. Following this, procedures were developed for diagnosing rubella, and for demonstrating previous infection and immunity by means of the antibody level in the blood. The techniques for diagnosing rubella in the laboratory are being improved continually. Within a matter of hours a pregnant woman can now be told definitely whether or not she has had rubella at some time in her life. Furthermore, the new diagnostic techniques have already had far-reaching consequences in improved understanding of the disease, and are leading to its better management and control.

The Classic Rubella Syndrome

☐ The rubella virus causes abnormalities of both form and function. The classic rubella syndrome was a combination of cataracts, partial or complete deafness, and congenital heart disease. To this triad was later added a fourth component, mental retardation.

An extraordinarily severe rubella epidemic struck the United States three years ago, starting on the east coast in the winter of 1963 and continuing westward through the spring of 1965. This epidemic left large numbers of defective children in its wake, allowing the medical profession to study this disease in more detail than previously was possible. Uncertain diagnosis and small groups of children in any one place had, up to this time, made it difficult to add to our knowledge rapidly. The fortuitous combination of new techniques for accurate diagnosis and large populations of babies available for observation gave a decided impetus to research.

At this time it became evident that the harmful effects of the virus were not limited to the classic syndrome. In fact, other serious conditions, either transient or permanent, could be produced by the virus without any abnormalities of the heart or vision or hearing at all. The rubella syndrome was thus redefined to include: prematurity; low birth weight in spite of full term pregnancy, and failure to gain weight normally after birth; blood abnormalities, including anemia and purpura (hemorrhage into the skin); low grade involvement of the central nervous system as evidenced by a full fontanel and abnormal spinal fluid, and seizures; abnormally small size of the head, and mental retardation; enlargement of the liver and spleen, and of the lymph nodes; multiple bony abnormalities, detectable by x-ray and clearing up in a month or two after birth; genito-urinary defects; mortality.

It has also become apparent that eye defects are not limited to congenital cataracts, but include glaucoma, nystagmus, microphthalmia, pigmentary retinopathy, and various kinds of strabismus. Since one eye may develop embryologically more slowly than the other, there will not necessarily be the same type or degree of damage to both eyes.

An additional element that is gradually becoming clearer is the dynamics of the situation. Congenital rubella is not a static disease. It may affect the baby differently at different times during gestation and after. Moreover, we are dealing with a human organism during its most accelerated period of growth. This combination appears to be responsible for much of the variation in the dire consequences of congenital rubella.

The Infected Baby Can Pass on the Disease

☐ Two decades after Gregg's original report, a second equally unexpected discovery concerning rubella was made—the infected baby can pass on the infection to susceptible individuals. This is of special concern to the hospital personnel and family members with whom it comes in contact.

This infectiousness is due to the fact that the virus can persist through pregnancy, and remain in the throat secretions and urine of the baby for up to a year or more after birth. Strangely enough, at the time that a baby is "shedding" the virus, this same baby may have an antibody level comparable to that of its mother. This simultaneous existence of a virus and its antibody in one person is very unusual. Laboratory tests to demonstrate the presence of the virus are needed, since some of the babies who are infectious to others show no signs of the rubella syndrome, and may be entirely normal in appearance.

A Recommendation for Isolation Precautions

☐ In 1965, the Committee on Control of Infectious Diseases of the American Academy of Pediatrics issued a recommendation that infants born with congenital rubella be managed with the same isolation precautions employed for patients with rubella. The newborn baby should be cared for in complete isolation in a separate hospital area, and should not be looked after by women who are susceptible to rubella and who might become pregnant. Rubella infected infants requiring hospitalization beyond the newborn period should be placed on precautions until such time as it is determined that they are no longer shedding the virus.

The Need for A Rubella Vaccine

☐ In order to do away with rubella, a safe vaccine must be developed, tested, distributed, and used. A vaccine is especially important for protecting susceptible young married women against infection before they become pregnant.

At the present time, a number of laboratories are concentrating on this task. Coordination is centered in the National Institute of Allergy and Infectious Diseases of the Public Health Service. Results are encouraging. We can now look forward to a reliable vaccine against rubella being available in the next few years.

The epidemic cycle of rubella is six to seven years. Most of the big epidemics have coincided with war years, in which there has been a large concentration of young men in military camps, and the general population has been on the move. In fact, the present mobility of our generation may be partly accountable for the extent of the current problem.

Many states have kept records on rubella as far back as 1920. Over twenty since have reported it optionally on a monthly basis to the Communicable Disease Center of the Public Health Service since 1955. Although never considered complete, these cumulative statistics have served to show definite trends in the epidemic behavior of the disease. After the major epidemic of 1963-65, in which there were 1,800,000 cases of rubella and between 10-20,000 babies born with the rubella syndrome, the Biennial Conference of State and Territorial Epidemiologists recommended that it be placed on the list of nationally reported diseases effective January 1, 1966. Since this has been done, more accurate and extensive figures will become available.

Interpreting the Statistics

☐ Because of the serious effects of maternal rubella, any reports on new developments in prevention or control are given widespread publicity in the press. A word of caution is needed. Whenever a report is released, it is important to be clear about what group is being discussed. One area under consideration may be the incidence of the disease. Statistics may be given on the total number of cases in a stated period (1,800,000 cases of rubella in the United States during the 1964 epidemic) or they may cover only one selected study group (pre-school children with rubella, pregnant women exposed to rubella). On the other hand, the series presented may actually pertain to the rubella babies themselves. Here again, the figures may apply to a total group (babies who die before birth, babies who survive with one or more defects) or the statistics may apply to a limited group with a common denominator (babies with a temporary blood abnormality but no physical deformities, children with a combined visual and hearing defect). It is safe to say that there is no area of research in which it is more important to differentiate the population under study than this very complicated disease with its diverse manifestations.

The last word has not been written about the rubella babies. We are only beginning to learn who they are, how many there are, and what handicaps they have. What we do know, however, should quicken our interest in finding ways to help them.

There is a great urgency about this. The children are here. There is no question that their number is increasing. Personnel must be recruited and trained. Traditional educational methods must be adapted for the school-age child, and new training techniques must be originated for the babies. If these children are to fit into the mainstream of society, we must start today to plan for their future.

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Rubella: Implications for Education

EDWARD J. WATERHOUSE, LITT.D.

Dr. Waterhouse is director of the Perkins School for the Blind in Watertown, Massachusetts. He is also chairman of the International Conference of Educators of Blind Youth and chairman of the International Committee on Education for the Deaf-Blind

For the second time in a generation, educators of blind children are, for medical reasons, facing a large and undetermined increase in their enrollments. In the 1940's, prematurely born youngsters who were victims or retrolental fibroplasia entered our schools. Before the end of the 1960's, a large number of handicapped children whose mothers had rubella (German measles) during the early stages of pregnancy will be of school age. Already the parents of these children are clamoring for assistance. In most instances, help is not available.

As yet, no one knows how many "rubella babies" there are or the extent and intensity of their handicaps.[1] Agencies are learning of many rubella children, now about two years old, who are deaf and blind. At Perkins, we receive reports almost daily from these agencies and from parents. They tell of a dozen children here, or twenty there. It would seem that there are at least fifty such youngsters in Massachusetts. If this state is average in the incidence of this disease and in the effectiveness of referral services, these figures would indicate a total reported population of about 2,000 for the country as a whole. The figures, however, probably represent only the visible part of a largely hidden iceberg. Many of the children do not come to notice until their second birthday, when parents are sufficiently anxious to seek aid.

At first glance, the estimates of children who will need help do not seem formidable. There were, perhaps, as many as 20,000 victims of retrolental fibroplasia. Yet a further study of the situation shows that, in relation to available services, the present threat is a greater problem. For one thing, the "retrolentals" were spread over a decade or more; the "rubellas" are concentrated in about a two-year period. The retrolental wave, moreover, was absorbed partly by the expansion of residential schools for the blind and partly by the rapid multiplication of educational services for blind children in regular schools. Before considering how educators might prepare for the rubella children, a descriptive account of these children is perhaps in order.

The rubella syndrome was identified first in Australia by Dr. Norman McAlister Gregg in 1941. Today, we know that children, whose mothers contracted German measles during the early stages of pregnancy, may have one of a variety of defects, the commonest of which are cardiac complications, mental retardation, blindness, and deafness. Usually a child has a combination of these defects. The number who are only blind or only deaf are few. There are far more deaf-blind children expected in future classes, and these are our major concern.

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[1] In the September 1966 *Lantern*, published by the Perkins School for the Blind, the author analyzed the few figures available on children affected by maternal rubella.

Eight Were Able to Profit from an Educational Program

☐ The staff of the Department for Deaf-Blind Children at Perkins School for the Blind has been able to examine over forty rubella deaf-blind children in recent years. Twenty-four of these were considered promising enough to enroll; the others seemed to be too low mentally. Of the twenty-four admitted, sixteen proved trainable and eight were able to profit from an educational program. As may be surmised, rubella deaf-blind children, as a group, are not of high mentality, although we have enrolled several of at least average ability.

With two exceptions, the rubella children observed by our staff have had congenital cataracts, and surgery usually has provided some relief. None of these youngsters have normal sight, but all have some residual vision. The two exceptions, however, are totally blind as a result of glaucoma. (A recent and disturbing report indicates a sizable group of rubella children in one community who are totally blind from glaucoma.)

The children who were seen by our staff are not totally deaf. Eleven have a flat audiogram at the sixty to eighty decibel level, but six have hearing only in the very low frequencies. Practically all these children fall into the dull-normal range of intelligence or are below this level.

When a Child Should Be Classified as Deaf-Blind

☐ To summarize, these children, while not totally deaf nor always legally blind, are covered by the definition of a deaf-blind child adopted by the National Committee for Deaf-Blind Children in the United States. According to this Committee, a child should be classified as deaf-blind if, as a result of his dual handicaps, he cannot benefit from regular programs for the deaf or the blind.

Educators of the deaf and the blind are well aware of the manifold demands made on them by the range of individual differences to be found in even the smallest groups of pupils. Blindness and deafness together multiply these differences considerably. The problems of constantly evaluating a child's needs and adjusting his program to produce the best results are complicated by the scarcity of available knowledge about these children.

Except for the pioneering work of two very competent staff members at Perkins, directed by the head of the Department of Psychology and Guidance, no research into the developmental problems of deaf-blind children is, to our knowledge, being done anywhere. Their work is hampered by the smallness of the group. Whenever possible, they observe deaf-blind children in different parts of the United States and, occasionally, overseas.

Apparently no studies have yet been made of deaf-blind children during pre-school years. By the chronological age of five, most of them still have the social age of an infant. In view of the progress deaf children in the two-to-five year range can make at home, a major study should be made to determine whether similar growth can be accomplished by the deaf-blind under suitable direction.

In recent years, effective help has been provided to parents of deaf children and of blind children. Yet, despite the awareness that parents of a deaf-blind child face a far more difficult problem of communication and a deaf-blind child has the greatest need of family support, services for families have been largely insufficient. This is no doubt because the number of families involved has been so small. Is it possible that the rubella wave will alert more communities to this need?

A joint pioneering project, dealing with families in which there is a deaf-blind child, has recently been started through the co-sponsorship of the Boston Center for Blind Children and Perkins School for the Blind. An experienced home visitor is paying calls on parents of children in Massachusetts, primarily to allay their anxieties, and secondarily to learn in more detail how the parents interpret their needs. The growth of this project will depend on the initial findings of the home visitor. There is some information concerning similar programs in other communities. All of this is on a very small scale.

Programs for Educating Deaf-Blind Children

☐ What are the current programs for the education of deaf-blind children? For the last few years, the register of deaf-blind children kept by the American Foundation for the Blind has shown that about ninety of them are in special programs set up in seven schools for the blind. These are at the Washington State School for the Blind at Vancouver, the California School for the Blind at Berkeley, the Illinois Braille and Sight-Saving School at Jacksonville, the Michigan State School for the Blind at Lansing, the Alabama Institute for the Deaf and the Blind at Talledega, the New York Institute for the Education of the Blind in New York City, and at Perkins School for the Blind in Watertown, Massachusetts. Perkins and Alabama account for about seventy of the children.

The Probability of a Thousand Educable Deaf-Blind Children

☐ The Foundation's register includes several hundred other deaf-blind children, many of whom are believed to be uneducable. Every now and then, however, one of this group is enrolled in a special program and proves capable of learning. It is in relation to this present situation that the probability of a thousand or more educable deaf-blind children reaching the age of five in three years should be considered. In addition, of course, there will presumably be the usual number of deaf-blind children not affected by rubella who will be in need of education.

Just how fast can programs for deaf-blind children be expected to grow under optimum conditions? Probably the most rapid expansion on record occurred in the Department for Deaf-Blind Children at Perkins during the years 1955 to 1960.

Following the establishment of the first program for training teachers of deaf-blind children in 1955, given jointly by Boston University and Perkins, pupil enrollment increased from five to thirty-three in five years. In the course of this period, the professional staff grew from five to twenty. Since 1960, however, there have been only minor increases in students or staff. It appears that a plateau has been reached.

Unfortunately, the teacher-training program at Perkins which is now given in cooperation with Boston College is still the only one in existence. In 1966, however, the Department of Health, Education, and Welfare awarded planning grants to the George Peabody College for Teachers at Nashville and to San Francisco State College. It is hoped these programs will begin during 1967.

One Requirement for a Successful Training Program

☐ As seen above, the Department at Perkins grew rapidly, but soon reached a plateau; however, the problems faced at Perkins may not be typical of what might be expected elsewhere. One requirement for a successful training program is the presence of deaf-blind children for observation and practice teaching. With between thirty and forty pupils, we have found it necessary to limit trainees to ten. With the exception of the class of 1956, there had never been ten American candidates for this course. The class of 1967 includes seven from the United States and one from New South Wales, New Zealand, and Denmark.

The Very Special Demands Made on Staff Members

☐ Nevertheless, there are considerations which should be generally accounted for. Teaching deaf-blind children makes very special demands on staff members. Each teacher is assigned two pupils, and she generally works with one while the other is at gym or industrial arts or is studying alone. Progress is uneven, with months elapsing during which a child may not seem to be progressing. The word "patient," so often used to describe teachers of handicapped children, seems quite inadequate when the pupil is deaf-blind. Progress, when it occurs, however, provides the teacher with unusually great satisfactions. But the teacher must be prepared to wait for these moments.

The slowness of a pupil's progress also makes another type of demand on the teacher. It is necessary that she function at maximum efficiency for a maximum amount of time. To keep the long years of schooling to a minimum—indeed, to assure that the pupil will have learned as much as possible before adulthood—requires that each lesson be learned correctly, and if possible, learned correctly the first time. Repetition of lessons is dangerously time-consuming. Teachers who succeed with deaf-blind children give of themselves to a degree rarely experienced in other fields. Young men and women with a willingness to serve do exist, and a number are on the Perkins staff and in similar institutions. Recruitment has been greatly helped by the film "Children of the Silent Night" which shows the progress of a deaf-blind child and clearly indicates the teaching process. Nevertheless, the supply of suitable candidates in America is apparently relatively small. Federal scholarships will help attract more candidates, but how many of these will prove to be suitable remains to be seen. There are no reliable screening techniques to weed out the many plausible, enthusiastic, and sincere young men and women who do not have the staying power the task requires. The turnover in this field has proved to be abnormally high.

An Inadequate Number of Well-Trained Teachers

☐ Probably none of the administrators of existing programs for deaf-blind children would claim to have an adequate number of well-trained teachers on their faculty. The proposed programs at Nashville and San Francisco should improve the quality of teaching in their localities and, hopefully, elsewhere. They should increase the supply of teachers available to the field as a whole. These programs, however, with the existing program in Boston, will hardly raise the professional standards in this highly specialized field to a point where it can be claimed that every deaf-blind child is getting a program ideally suited to his unique requirements. This statement describes the immediate situation and does not consider what the needs will be when the rubella children reach school age in two or three years.

The smallness of their number has certainly held back the provision of services to deaf-blind people. It is extraordinary how widespread ignorance is, even among professional people, with regard to the capabilities of deaf-blind people and even their very existence. During the ceremonies commemorating the centennial of the birth of Anne Sullivan in 1966, the staff members of the Industrial Home for the Blind in Brooklyn and of Perkins frequently found persons well versed in many aspects of the education of the handicapped who had never encountered a deaf-blind person and who were not sure that there were any, other than Helen Keller, in existence.

Who Accepts Responsibility for Deaf-Blind Children

☐ For some reason, the problems of the deaf-blind have been left, in recent years, largely to workers with the blind. This has not always been so. At the turn of the century there were more deaf-blind children in schools for the deaf in America than there were in schools for the blind. Lately, however, educators of the deaf have resisted accepting responsibility for such children, feeling, no doubt sincerely, that educators of the blind are better qualified to assist.

Obviously, if rubella children are to receive the treatment they deserve, all available resources must be used to the fullest extent. It is notable, for example, that there is no special section in the Council for Exceptional Children that deals with the deaf-blind, although there are sections dealing with youngsters who have a variety of other handicaps. A prominent Massachusetts legislator, describing a conversation he had with one of the top educators of the deaf in the United States, explained that they had not considered the deaf-blind because they were discussing the "deaf with additional handicaps." This attitude which classifies the deaf-blind as "blind with an additional handicap," rather than "deaf with an additional handicap," is perhaps significant in explaining why educators of the deaf (who have, as a whole, far larger resources available to them than do educators of the blind), have not accepted their share in this responsibility.

The Most Serious Thought about Responsibilities

☐ We are sometimes asked what the federal government is planning to do about these children. Suffice it to say that the Department of Health, Education, and Welfare is very much concerned about this group and is not remaining idle. It would be out of order for me to predict what the government may or may not plan. It seems more important to me that all agencies, private and public alike, give the most serious thought to their responsibilities. The first task would be to determine the number of such deaf-blind children in any one community and analyze their needs. Evaluation services to discover the capabilities of a deaf-blind child are extremely limited. A small team from Perkins has been visiting deaf-blind children throughout the country in recent years and a number of children have also been brought to our school for testing. Clearly, this service cannot be expanded overnight to take care of the large numbers of children needing attention.

Unfortunately, there is little printed material available on the problems of the deaf-blind, and most of this does not apply to the pre-school child. A brief bibliography of available literature is appended to this article.

The National Committee for Deaf-Blind Children

☐ Following a conference on the education of the deaf-blind at Perkins School for the Blind in 1953, a national committee was established to promote the interests of deaf-blind children. Its executive committee consists of superintendents of schools where there are special programs for the deaf-blind, plus two representatives each from the American Association of Instructors of the

Blind, the Conference of Executives of American Schools for the Deaf, and the American Foundation for the Blind. This committee has met from time to time but cannot, of course, have any role other than an advisory one. Its definition of a deaf-blind child has proved to be its most important accomplishment so far, but it has also recognized certain standards that should be met by programs for the deaf-blind. For example, the committee has recommended that no department should be set up for fewer than five children and two teachers. It may well be that this committee can play a larger role during the coming years, particularly in professional and public education.

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Developmental Patterns of Individuals with Bilateral Congenital Anophthalmos

LEONARD A. BACHELIS, Ph.D.

Dr. Bachelis is chief psychologist at the Queens Child Guidance Center, Inc., in Queens, New York. He was formerly with the New York Association for the Blind, where research for this report was conducted and supported

Developmental problems which may be associated with lack of eye-structure formation, (i.e., congenital anophthalmos) have received scant attention in writing. Inasmuch as anophthalmos represents a congenital anomaly in which part of the embryonic structure of the brain fails to develop, it is plausible to question whether other defects of central nervous system development may be associated with the condition. In addition, one would expect other anomalies due to a generalized genetic and/or growth disturbance to accompany congenital anophthalmos. On a practical level, there is need to identify developmental patterns in individuals with congenital anophthalmos so that physicians, psychologists, and educators may predict a patient's future development and, on the basis of their predictions, formulate suitable adjustment and rehabilitation programs. The study reported here explored the nature of developmental patterns of individuals with congenital anophthalmos in order to provide information in this relatively unexplored area.

With cooperation of the New York State Commission for the Blind, all known cases of bilateral congenital anophthalmos in the state of New York were identified. There was a total of thirty-four cases; information concerning twenty-four cases was obtained and constituted the research sample of the study. Ten of the subjects were male and fourteen were female. The developmental history of each subject in the study was investigated through use of a questionnaire completed by professional members of agencies which had knowledge of the subjects. The questionnaire evaluated the following variables of an individual's developmental history: 1. intellectual status (measured by intelligence tests); 2. presence or absence of additional physical handicaps; 3. presence or absence of additional medical problems; 4. evidence of brain damage (indicated by clinical evaluation and/or diagnostic studies); 5. emotional adjustment; 6. social adjustment; 7. vocational adjustment.

Inasmuch as the population sample of the study consisted of a relatively small number of subjects with a wide range of age levels, the data were analyzed mostly by simple quantitative and qualitative measures rather than by the use of more rigorous statistical techniques.

The age distribution of the sample is shown in Table 1.

Intellectual Status and School Achievement

☐ Table 2 presents the distribution of intelligence level of the subjects. As may be seen from the table, there were a total of fifteen subjects for whom a formally

The author wishes to acknowledge the assistance of Faith Bachelis, Ph.D., and Janice Weinman in preparing details for this report.

assessed intelligence quotient was reported. Twelve out of these fifteen, or 75 percent, were mentally retarded (I.Q. below 90). The intelligence quotients for three of the fifteen subjects for whom an I.Q. was reported were above 110. Eight out of the twelve subjects for whom I.Q.s were reported, or 67 percent, were severely retarded (I.Q. below 50).

TABLE 1
Age Distribution of Subjects

Age Range	*No. Cases*	*Percent*
Birth to 5 years[a]	5	21
6 to 11 years	5	21
12 to 17 years[b]	7	29
18 to 35 years	4	17
Over 35 years[c]	3	12
Total	24	100

[a] Three subjects in this age group were deceased at ages 1, 2, and 4 years.
[b] One subject in this group was deceased at 12 years.
[c] Subjects' ages are 37, 58, and 66 years.

TABLE 2
Intelligence Levels of Congenital Anophthalmos Subjects Assessed by Psychological Tests[a]

Intelligence Quotient	*No. Cases*	*Percent*
Under 50	8	33.3
51 to 69	3	12.5
70 to 89	1	4.2
90 to 109	0	0
110 and over	3	12.5
Not Reported	9	37.5
Total	24	100.0

[a] A variety of intelligence tests were used, including the Wechsler Intelligence Scale for Children, the Wechsler Adult Intelligence Scale, Wechsler-Bellevue Form I, Interim Hayes-Binet Intelligence Test for the Blind, Kuhlmann-Anderson Test, and Cattell Infant Scale (Adapted). These tests vary in comparability.

It may be noted that there was a relatively high number of subjects for whom an I.Q. was not reported, nine out of the total of twenty-four subjects. Descriptive reports were available for eight of these subjects. The reports indicated that two subjects in this group showed no evidence of mental retardation, while the remaining six cases were described with comments indicating the presence of varied degrees of mental retardation.

Mental retardation was thus a frequent finding associated with congenital anophthalmos. As noted in Table 2, there was a gap in the distribution of intelligence levels. None of the subjects had intelligence test scores within the average range. Of subjects who were not mentally retarded, all were found to be of above average intelligence. The frequency distribution of intelligence for the subjects thus appeared to be bi-modal, with the majority of cases skewed in the direction of low I.Q., an absence of cases within the average range, and a lower frequency of high I.Q. constituting the second modal point.

Emotional Status of Subjects

☐ Table 3 presents the frequency of emotional disturbance reported for the sample. As may be seen from the table, 29 percent of the subjects were reported to be emotionally disturbed while 38 percent of the subjects were judged to be free of emotional disturbance. Data concerning the emotional status of subjects was not available for eight subjects, or 33 percent of the sample. In confining the analysis to subjects for whom information concerning emotional status was available, the results indicate that 43 percent of the subjects were judged as emotionally disturbed. Thus approximately one out of every two persons for whom data were available was judged to have emotional disturbances. This is not surprising since the social adjustment problems of those blind due to congenital anophthalmos is frequently compounded by the presence of handicaps such as mental retardation, neuromuscular defects, and other central nervous system dysfunctions.

TABLE 3

Frequency of Emotional Disturbance among Subjects

Emotional Disturbance	*No. Cases*	*Percent*
Present	7	29
Absent	9	38
Don't Know	8	33
Total	24	100

Associated Physical or Medical Handicaps

☐ Fourteen of the twenty-four subjects, constituting 58 percent of the sample, were reported as having physical or medical handicaps in addition to congenital anophthalmos. Eight out of the twenty-four subjects, or 33 percent of the sample, were reported as having no additional physical or medical handicaps. Information concerning additional physical or medical handicaps was not available on two of the subjects of the sample. In considering subjects who were reported as mentally retarded, N = 12, it was found that 75 percent of them evidenced additional medical or physical handicaps. Since only three subjects in the study were classified as average or above average in intelligence, generalizations concerning this group cannot be reliably made. However, it might be noted that only one of the subjects not classified as mentally retarded was associated with an additional handicap, cardiac defect.

The results show that there was a high incidence of additional physical and medical handicaps associated with congenital anophthalmos. A trend was suggested from the findings in that a higher incidence of additional medical and physical handicaps tended to be associated with subjects who were mentally retarded.

Table 4 presents the incidence of the specific physical or medical handicaps among subjects. As seen from the table, the largest number of physical and medical handicaps were those stemming from maldevelopment of the central nervous system, e.g., neuromuscular disorders, convulsive disorders, and maldevelopment of the brain case. In addition, there was a fairly high incidence of other congenital anomalies, e.g., polydactaly, toes missing, harelip, cleft palate, defective limb development, malformed toes, and congenital heart defects.

TABLE 4

Additional Physical or Medical Handicaps in Congenital Anophthalmos Subjects (N = 24)

Associated Physical or Medical Handicaps		*Number of Subjects within Total Sample*	*Incidence within Total Sample, Percent*
Neuromuscular dysfunction		10	42
Convulsive disorder		4	17
Malformed skull		3	13
Microcephalic	1		
Arrested hydrocephalus	1		
Bones back of skull missing	1		
Other congenital anomalies		3	13
Cardiac dysfunction		2	8
Anemia		1	4
Pneumonia		1	4
Gastrointestinal symptoms		1	4
None		8	33
Don't Know		2	9

Social, Educational and Vocational Adjustment

☐ Table 5 presents ratings of the degree of social independence of subjects. As may be seen from the table, the highest frequency of subjects for whom data was available, 37.5 percent of the sample, required custodial care. In limiting the data to those subjects for whom information was available, nine out of fifteen, or 60 percent, were rated as requiring custodial care. The remaining six, or 40 percent, were considered to require minimal assistance.

TABLE 5

Ratings of Degree of Subjects' Social Independence

Type of Care Required in Performing Daily Activities	*No. Cases*	*Percent*
Minimal assistance required	6	15.0
Custodial care required	9	37.5
Don't Know	9	37.5
Total	24	100.0

Table 6 reports the number of subjects attending an educational institution. As seen from the table, 58.5 percent of the subjects attended some form of educational institution during some time of their life. Within the group of those receiving schooling, the largest number, 35.7 percent, attended residential schools for the blind. Those not attending any form of educational institution constituted 41.5 percent of the sample.

TABLE 6
Educational Placement

Educational Placement	*No. Cases*	*Percent*
Attending		
Residential school for the blind	5	21.0
Residential school for the retarded	4	17.0
Day school for the blind	3	12.5
College	2	8.0
Total	14	58.5
Not Attending		
At home	1	4.0
Too young (under age 7) or don't know	9	37.5
Total	10	41.5
Grand total	24	100.0

Only three of the twenty-four subjects in the sample were reported as presently or previously gainfully employed. These were all the subjects whose I.Q. was above average. One subject was employed as a dictaphone transcriber, one as a piano tuner and music teacher, and the third had been employed in the past in assembly work.

Case History of Subjects

☐ In addition to the data presented above, clinical descriptions were obtained on most subjects of the study. The clinical notes show that the subjects varied to a large degree in their developmental status. Some of the subjects were making an essentially normal life adjustment within the context of the limitations imposed by their blindness. In contrast to this, a majority of the subjects were poorly adjusted due to multiple handicaps. Case history descriptions of subjects with good adjustment and those with poor adjustment are given below:

Subjects with Good Adjustment

☐ 1. Teenage girl, above average intelligence. Had been enrolled in a residential school for the blind for the past ten years. Noted to be a gregarious and cheerful girl, though sometimes gave the appearance of being insecure.

2. Young woman of above average intelligence. Graduated from a residential school for the blind after attending eleven years. Employed as a dictaphone operator and described as quiet, friendly, honest, conscientious, and sensitive.

3. Older female subject. History of employment, twenty years ago, doing assembly work for a period of two years. At present attends a part-time occupational class making sample craft objects.

4. Young woman in her mid-twenties, a senior in college. Described as self-reliant, intelligent, articulate, and confident.

5. Young boy attending residential school for the blind. I.Q. estimated to be in the dull normal range as measured by the Hayes-Binet Intelligence Test. Reported as low average in achievement.

6. Male, age sixty-six, rated in the superior range of intelligence. Attended a music conservatory and was employed as part-time music teacher and tuner.

Subjects with Poor Adjustment

☐ 1. Female, age ten, cerebral palsy, spastic quadriplegia, seizure disorder, arrested hydrocephalus. Functioning in the defective range of intelligence, making only minimal adjustments to school. Personality immature and hyperirritable.

2. Male, age two, moderately retarded, general development retarded and infantile.

3. Female deceased at age sixteen months following constant respiratory infection. Umbilical hernia, tongue-tie, heart to right of sternum, partial cleft palate, ribs short, limbs defective, frequent vomiting.

4. Female, age thirteen, severely retarded, attending state school for the retarded. Pleasant, quiet and friendly. Speech normal. Physical condition fair.

5. Male, age twenty-one, severely retarded, attending state school for the retarded. Unsteady gait, at times makes loud screams, no intelligible speech, no response to commands. Must be fed and dressed. Not toilet trained.

6. Female, age eleven, attending residential school for the multiply handicapped. Infantile, severely retarded speech development, rigidity of muscular movement, somewhat hyperactive, tense and stubborn. Relates well to other children in the school.

7. Male, age four, severely retarded, brain damaged.

8. Female, age two, severely retarded, hydrocephalus, unable to sit, drinks from bottle, shows no emotional responsiveness. Attends state school for the retarded.

9. Male, age seventeen, severely retarded, cerebral palsy. Has difficulty in dressing and feeding self. Described as pleasant.

10. Female, age sixteen. Can sit but unable to stand or walk. No speech. Has convulsive disorder, checked by drugs. Understands some simple commands. Attends state school for the retarded.

11. Female, age thirty-seven, severely retarded. Congenital deformities of hands and feet, fingers small, crippled, contracted. Big toes resemble thumbs, fifth toe missing, left leg shorter than right. Attends state school for the retarded.

12. Female, age fifteen, mentally retarded. Walks with assistance, likes being rocked, makes sounds. Poor physical condition, abdomen distended.

13. Male, age seventeen, mentally retarded. Bones in back of skull missing, does not speak. Institution recommended but mother prefers to keep him home.

14. Female, age twenty-three, severely retarded. Congenital heart lesion, cyanotic at times. Walking commenced at age seven. Speech limited.

15. Male, age fifteen, mentally retarded. Placed in state school for the retarded. No other information available.

16. Female, age thirteen, development slow. Happy, overweight, sleeps a great deal.

17. Male, age nine, attends nursery school. Speech well developed. Physical development lagging, spatial orientation poor, many fears. (Mother has anophthalmos.)

18. Male, age seven, mentally retarded. Attends school for the blind. Poor school achievement.

Summary

☐ In summary, congenital anophthalmos is frequently associated with additional handicaps. The largest number of subjects in the study were multiply handicapped, evidencing mental retardation, neuromuscular deficits, other congenital anomalies, emotional disturbance, and a variety of other defects. The subjects were distributed along two extremes. At one extreme, there was a small number of subjects who evidenced good adjustment, above average intelligence, and relative absence of additional handicaps. The larger number of subjects in the study, on the other extreme, evidenced additional physical and medical problems and developmental retardation which interfered with good adjustment and made their prognosis poor. The findings of the study raised the question of whether the etiology explaining congenital anophthalmos differs in those cases where additional handicaps are absent from the group of cases in which there is a syndrome characterized by a broader degree of developmental failure, especially as related to development of the brain. The results of the study gave confirmation that congenital anophthalmos is associated with additional handicaps and developmental retardation. The findings suggest that early, comprehensive diagnostic evaluations are important to properly identify and treat the possible additional handicaps which may be present. The findings further indicated that there are subjects with congenital anophthalmos who are capable of making an essentially normal development and adjustment in all spheres of human behavior within the confines of their visual handicap.

Summer Course in Modified Grade Three Braille

The Hadley School of Winnetka, Illinois has announced introduction of a course in modified grade three braille. To permit easier mastery of reading and writing this abbreviated form, the course will relax some spacing rules that are part of the standard grade three code. It will be arranged, however, so that students who wish to use the full system can readily do so.

The course is intended to assist those who need to take notes speedily and read them easily at some future time. Students who wish to master the system before returning to school in the fall should enroll this month.

For further information, write to: The Hadley School for the Blind, Winnetka, Illinois 60093.

Salaries for Selected Occupations in Services for the Blind, January 1966

The survey was conducted in the Division of Occupational Pay of the U.S. Bureau of Labor Statistics by Toivo P. Kanninen under the general direction of L. R. Linsenmayer, assistant commissioner for wages and industrial relations. The analysis was prepared by Stephen H. Perloff, under the supervision of Louis E. Badenhoop. Assistance in planning the survey was provided by Huesten Collingwood, director, Personnel and Training Service, under the direction of Harold G. Roberts, associate director for service of the American Foundation for the Blind.

This nationwide survey of salary rates for selected occupations in governmental and nongovernmental agencies serving the blind was conducted by the United States Bureau of Labor Statistics and supported, in part by research and development grant No. 1898 from the U. S. Vocational Rehabilitation Administration.* Because of the increased importance of services for the blind in local school systems, the survey includes such schools, as well as special agencies and residential schools which comprised the 1961 survey.

Earnings of employees of agencies and schools for the blind have traditionally lagged behind comparable fields of education, health, rehabilitation and social welfare. Writing a quarter of a century ago, the late Robert E. Irwin observed that "teachers in residential schools for the blind have the same professional training as do teachers in public schools, but . . . their salaries are far below those paid to public school teachers."** As of January 1966, this situation had not significantly improved. For example, the average annual salary for elementary school teachers who received no maintenance in residential schools for the blind was $6030 as compared with the 30 percent higher rate of $7890 earned by the average teacher of blind children on the elementary level in local day schools.

The current survey reveals that salaries for the occupations selected have been increasing at a rate of about 5 percent each year. While salaries of rehabilitation teachers (home teachers) have increased at a slightly higher rate, this group of workers receives less pay than all but some categories of classroom teachers (in residential schools) among the twenty-six occupations studied. The average salary of social workers with master's degrees was found to be only $7060, a rate barely over the minimum of $7000 recommended by the National Association of Social Workers for beginning social workers with master's degrees but no prior work experience. While vocational rehabilitation counselors fare better than both social workers and rehabilitation teachers, it is generally conceded that many state vocational rehabilitation services for the blind continue to pay their counselors less than the general rehabilitation agency in the same state.

The following compendium contains further interesting information about the salaries and characteristics of a significant number of workers for the blind. It is adapted from the narrative summary of the 1966 salary survey. The complete report is rather complex and detailed, and will be of interest primarily to experienced statisticians and scholars. The American Foundation for the Blind is preparing an interpretive brochure, based on the salary survey, to assist local agencies, schools, boards of directors, legislatures, community funds, and others who share a concern about improving the quality of services for the blind in future salary planning.

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* *Salaries for Selected Occupations in Services for the Blind, January 1966,* Bureau of Labor Statistics, Bulletin #1500, U.S. Department of Labor, Washington D.C., 1966 (On sale by the U.S. Government Printing Office, Washington D.C. 20402; price, 30¢ a copy).

** Lowenfeld, Berthold: *Teachers of the Blind, Their Status and Salaries.* New York: American Foundation for the Blind, 1941.

Salaries for workers engaged in services for the blind were generally higher in January 1966 than in May 1961[1] for the professional and administrative occupations surveyed in both years by the Bureau of Labor Statistics. During this period, the increase in the salary level for these occupations as a group amounted to 28 percent for all agencies, and was about the same in both government and nongovernment agencies. This comparison excludes local day-school systems, which were not included in the 1961 survey.

Agencies surveyed in 1966 employed almost 11,000 people who spent at least half their time serving the blind. Governmental agencies employed almost 7,000, and nongovernmental agencies about 4,000 of these people. The twenty-six survey occupations accounted for almost 80 percent of all the full-time professional and administrative employees. Women slightly outnumbered men in employment, although the proportion of each sex varied widely by occupation. About 25 percent of the employees reported in the survey occupations were legally blind, with the percentage of blind employment ranging from 3 percent for home economics teachers to 81 percent for rehabilitation teachers.

Median annual salaries in January 1966 ranged from $5150 for teachers of arts and crafts to $11,290 for superintendents of residential schools. Elementary school teachers, the largest occupation surveyed, had a median salary of $6760. The next largest category studied, secondary school teachers, reported a median salary of $6720.

Higher salaries were reported for government than for nongovernmental agencies for most of the occupations. Salaries of men tended to be greater than those of women in the twenty occupations where comparisons could be made.

Generally, salaries increased with each ascending educational attainment level. In twenty of the twenty-six occupations, more than two-thirds of the employees had at least a bachelor's degree. Eight occupations reported more than half the employees as having at least a master's degree. In the two largest occupations studied, elementary school teachers and secondary school teachers, 34 and 38 percent of the employees, respectively, had attained advanced degrees.

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[1] See *Salaries for Selected Occupations in Services for the Blind, May 1961* (BLS Bulletin 1322, 1962).

Employment Characteristics are Described

☐ In January 1966, about 11,000 people were employed for at least half of their time in providing services for the legally blind.[2] Governmentally administered agencies, including local day-school systems, accounted for almost 7000 and nongovernmental agencies for about 4000 of these employees. Approximately a tenth were employed part time, regularly working less than thirty hours a week. About half of the full-time workers were found in professional and administrative occupations.

Employees in the selected survey occupations accounted for almost 80 percent of all reported full-time professional and administrative employees. The rest of those reported were either employed in occupations other than those selected for study or had duties too diverse to be classified in the occupations as defined for the survey.

While local day-school employees contributed only 8 percent of the all-agency, full-time employment, they accounted for 19 percent of the employees in the survey occupations. Of the 791 full-time local day-school employees, 780 were found in governmentally administered day schools. The 708 persons reported in the survey occupations accounted for 95 percent of the full-time professional and administrative employees engaged in services for the blind in local day schools.

Governmental agencies, representing three-fourths of all agencies surveyed, contributed almost four-fifths of the 3769 employees in the survey occupations. Four hundred and fifty-nine of the 596 governmental agencies were local day-school systems; whereas, 169 of the 193 nongovernmental agencies were agencies other than residential schools.

Women employees slightly outnumbered men (55 percent compared with 45 percent) in the survey occupations as a group. Men and women were fairly evenly distributed among the occupations; however, in two, home economics teachers and superintendents of residential schools, all women and all men, respectively, were reported. Generally, men predominated in the higher level administrative occupations, and more women were reported in the selected teaching occupations.

A fourth of all employees in the selected survey occupations were legally blind. In governmental agencies, approximately a fourth of the employees studied were blind; whereas nongovernmental agencies reported a slightly lower proportion. When local day-school systems were excluded, however, governmental agencies showed nearly a third of the employees in the survey occupations as being blind.

The percentage of blind employees by occupation in all agencies ranged from 3 percent for home economics teachers to 81 percent for rehabilitation teachers. Occupations showing relatively large percentages of blind employees were placement specialists (67 percent), directors of rehabilitation centers (41 percent), music teachers (39 percent), vocational rehabilitation counselors (35

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[2] Legal blindness is defined for the survey as: central visual acuity which does not exceed 20/200 in the better eye with correcting lenses, or central visual acuity greater than 20/200 but accompanied by a limitation in the fields of vision such that the widest diameter of the visual field subtends an angle no greater than twenty degrees.

percent), social caseworkers (33 percent), and supervisors of vocational rehabilitation services (31 percent).

Median Annual Salaries Range from $5150 to $11,290

☐ In January 1966, median annual salaries for the twenty-six selected occupations ranged from $5150 for teachers of arts and crafts to $11,290 for superintendents of residential schools. Among the eleven teaching occupations, mobility instructors had the highest median salary, $6910. Elementary school teachers, the largest occupation surveyed with 908 employees, had a median salary of $6760. The next largest occupation studied, secondary school teachers, showed a median salary of $6720. Ninety percent of the elementary school and 89 percent of the secondary school teachers were employed by governmentally administered agencies.

Vocational rehabilitation counselors, numerically the largest occupation studied among the professional occupations, other than teaching, had a median salary of $7080. Caseworkers, with 238 employees covered by the survey, had median salaries that were almost identical in both the governmental and nongovernmental agencies ($6360 and $6300, respectively).

Supervisors of special education had the highest median salary ($9600) among the supervisory occupations. Those employed by governmental agencies were paid almost 25 percent more than those in nongovernmental agencies. The largest occupation in this group, supervisors of business enterprises, had a median salary of $6500. Almost nine-tenths of the workers in that occupation were employed in governmental agencies.

Among the five administrative occupations, directors of agencies for the blind was the largest in employment and had a median salary of $9930 for all agencies. Two-thirds of the directors were employed in nongovernmental agencies where their median salary was 22 percent below the median of $11,200 in governmental agencies. The highest median salary reported was $11,290 for superintendents of residential schools. For that occupation, nongovernmental agencies paid about 9 percent more than government agencies.

There was a significant difference in salary between directors in the larger agencies, where an assistant director was employed, and those in smaller agencies where there was no assistant director. The larger agencies employed, altogether, forty directors with a median salary of $12,000, while the median for the one hundred and ten directors of the agencies without assistant directors was $9000. A similar pattern of higher median salaries for directors in agencies reporting assistant directors existed by type of agency, as indicated in the following tabulation:

	Median annual salary		
Occupation	*All agencies*	*Governmental agencies*	*Nongovernmental agencies*
Directors in agencies reporting assistant directors	$12,000	$12,000	$11,000
Directors in agencies not reporting assistant directors	9000	10,075	8000

Assistant directors of agencies which, in almost every instance also reported directors, had a median salary of $9600.

Salaries for the twenty-six occupations were widely dispersed within each occupation, and the salary for the highest paid was more than twice that for the lowest paid within occupations. For most of the teaching occupations, and some others, salaries were less widely dispersed in nongovernmental than in governmental agencies. The dispersion of salaries was more widespread in local day-school systems than in nongovernmental agencies in those teaching occupations where comparisons could be made.

Median salaries in governmental agencies exceeded those in nongovernmental agencies in twenty-two of the twenty-six survey occupations. Those classifications in which median salaries were higher for nongovernmental agencies were supervisors of vocational rehabilitation services, superintendents of residential schools, principals of residential schools, and directors of rehabilitation centers. Nongovernmental agencies reported about 13, 13, 15, and 52 percent, respectively, of the employment in those occupations. The median salary for supervisors of sheltered workshops was the same in both types of agencies; each contributed about half of the total employment.

A comparison of relative salary levels among six selected teaching occupations in governmental local day-school systems, other governmental agencies (usually residential schools), and nongovernmental agencies is presented in the following tabulation.

Relative salary levels for selected occupations (governmental local day schools = 100)

	Governmental agencies		*Nongovernmental agencies*
	Local day schools	*Other agencies*	
Kindergarten teachers	100	76	68
Elementary school teachers, grades 1-6	100	77	72
Secondary school teachers, grades 7-12	100	73	68
Supervising teachers	100	85	92
Supervisors of special education	100	72	68
Music teachers	100	77	69

As can be seen from the tabulation, median salaries were significantly higher in local day-school systems than in the other two types of agencies. Also, median salaries were higher in the other governmental agencies than in the nongovernmental agencies, except for supervising teachers, where the reverse was true.

Salaries of Men Exceed Those of Women

☐ Median salaries of men exceeded those of women for all agencies combined in sixteen of the twenty-one occupations where comparisons could be made. In one occupation, secondary school teachers, the median salary was the same for both sexes. In four occupations, teachers of arts and crafts, casework supervisors, social caseworkers, and principals of residential schools, women had higher median salaries than men; and, except for principals of residential schools, women outnumbered men in those occupations. Separated by type of agency, median salaries of men were higher than for women in most of the occupations where comparisons could be made.

Differences in median salaries for women and men in the same survey occupation may be the result of several factors, including variations in the distribution of the sexes among agencies with disparate pay levels, minor differences in duties, length of service, and educational qualifications. For example, to the extent that individual salaries are adjusted on the basis of length of service or educational qualifications, longer service or higher educational qualifications for one sex can result in higher pay when both sexes are employed within the same salary range.

Lower Salaries Reported for Blind Employees

☐ Lower median salaries were reported for blind than for sighted employees in twelve of the twenty-three survey occupations where comparisons could be made. In three occupations, salaries were the same for both groups. In most cases, salaries of blind employees were 90 to 110 percent of the salaries of sighted employees. Sighted employees outnumbered those who were blind in all occupations but rehabilitation teachers and placement specialists, where blind employees accounted for 81 percent and 67 percent, respectively, of the employees.

Information also was collected on the incidence of maintenance allowances provided employees of residential schools. About three-fourths of the superintendents of residential schools covered by the survey received either partial or full maintenance.[3] Home economics teachers had the lowest proportion of employees receiving maintenance, as defined for the survey. A higher proportion of employees in nongovernmentally than in governmentally administered schools received maintenance allowances. Generally, a higher proportion received partial rather than full maintenance.

In most instances, median salaries for those receiving no maintenance were higher than those receiving partial or full maintenance. The salaries of those receiving partial maintenance were generally higher than those receiving full maintenance.

In the tabulation below, regional comparisons, by type of agency, were made by combining data for the occupations for which median salaries could be presented for every region. To eliminate the effect of regional employment differences, nationwide employment estimates for each occupation were used as constant weights in aggregating the data.

	Relative salary levels by region for selected occupations (West = 100 percent)			
Type of agency	*West*	*Northeast*	*North Central*	*South*
All agencies	100	86	89	77
Governmental agencies	100	92	88	77
Local day schools	100	95	89	78
Other governmental agencies	100	93	92	81

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[3] Full maintenance allowance is defined as at least two meals a day and lodging; partial maintenance is some allowance but less than that defined as full.

Salary levels for governmental agencies were highest in the West, followed by the Northeast, North Central, and South. The Northeast and North Central regions reversed positions in the all-agency comparison, because of the effect of the distribution of occupations in nongovernmental agencies, where salaries were highest in the North Central region. Nongovernmental agencies are included in the data for all agencies, but are not shown separately, since too few of the survey occupations were found in all four regions.

Number of Months Participants Were Employed Annually

☐ Survey participants were asked to report the number of months of employment upon which the annual salaries were based. In most cases, salaries in all agencies for the teaching occupations, other than mobility instructors and rehabilitation teachers, were based on work schedules almost evenly divided between nine and under ten months, and ten and under eleven months. For the rest of the survey occupations, including mobility instructors and rehabilitation teachers, salaries generally were based upon twelve-month schedules. For teachers in local school systems, as a group, annual salaries were based on work schedules of nine and under ten months for about two-fifths, and ten and under eleven months for about three-fifths. There was no evidence that salaries of the full-time employees surveyed differed according to the number of months employed annually.

Median annual salaries as of May 1961 and January 1966 are presented in table I for eighteen occupations studied in both periods and which were not affected by changes in survey occupational definitions. Local day schools are not included in this comparison as they were not surveyed in 1961. Using the January 1966 employment in these occupations as constant weights to eliminate the effect of changes in the proportion of workers represented in each of the categories, the increase in median salaries in all agencies, excluding local day schools, for these occupations as a group amounted to 28 percent. Median salaries in both governmental and nongovernmental agencies increased about 27 percent. The smaller increase in the governmental and nongovernmental agencies was caused by differing proportions of employment increases among occupations and agencies. For the ten comparable teaching occupations as a group, median salaries increased about 30 percent in all agencies. For the other eight occupations, the increase was about 27 percent.

During the period between surveys (approximately five years), the annual rate of increase amounted to about 5 percent for all agencies, and slightly less than 5 percent for both governmental and nongovermental agencies. For the teaching occupations in all agencies, the annual rate of increase was about 5.5 percent.

Educational Qualificaions of Employees Surveyed

☐ Data collected on the educational attainment of employees classified in the survey occupations indicated that salaries tended to increase with each ascending educational level.

In twenty of the twenty-six occupations, more than two-thirds of the employees had at least a bachelor's degree. In six occupations more than one-third of the employees reported educational qualifications of "high school or less" or "college, no degree": industrial arts teachers, teachers of arts and crafts, placement specialists, supervisors of business enterprises, assistant directors of agencies, and supervisors of sheltered workshops. Assistant directors of agencies, however, reported 37 percent of the employees as having qualifications of "master's degrees" or higher.

TABLE 1

Median Salaries: May 1961 and January 1966 and Percent Increase by Occupation

(Employment and median[1] annual salaries of employees in selected professional and administrative occupations[2] May 1961 and January 1966, and percent increase in salaries during the period.)

	All agencies, excluding local day schools				
	May 1961		*Jan. 1966*		
Occupation	*Number of employees*	*Median annual salaries*	*Number of employees*	*Median annual salaries*	*Percent increase in salaries*
Nursery and kindergarten teachers[3]	84	$4,360	59	$5,300	22
Elementary school teachers, grades 1-6	412	4,470	434	6,000	34
Secondary school teachers, grades 7-12	188	4,800	273	6,100	27
Supervising teachers	20	5,520	29	7,300	32
Music teachers	126	4,540	126	6,100	34
Physical education teachers	70	4,510	79	5,800	29
Industrial arts teachers[4]	111	4,680	104	5,900	26
Home economics teachers	64	4,480	66	5,830	30
Teachers of arts and crafts	68	4,290	61	5,000	17
Casework supervisors (social)	75	6,600	72	8,120	23
Caseworkers (social)	301	5,280	236	6,320	20
Vocational rehabilitation counselors	347	5,490	376	7,080	29
Mobility instructors	87	5,320	114	6,930	30
Rehabilitation teachers[5]	255	4,510	261	5,880	30
Superintendents of residential schools	41	8,520	39	11,080	30
Principals of residential schools	38	7,070	40	9,310	31
Directors of agencies (commissions or bureaus) for the blind	142	7,530	149	9,900	31
Assistant directors of agencies (commissions or bureaus) for the blind	49	8,100	57	9,600	19

[1] One-half of the salaries reported fall above and below the median salary.

[2] Teachers in local day schools are omitted from this comparison because local day schools were excluded from the scope of the 1961 study. Also, the 1966 data were adjusted to exclude one large agency that did not participate in the 1961 study.

[3] The 1966 data on these two occupations were combined for comparison with 1961 data.

[4] This title was vocational training teachers in 1961 survey.

[5] This title was home teachers in 1961 survey.

The following tabulation presents a distribution of occupations by the percent of employees having educational qualifications of a master's degree or higher.

Percent interval	*Occupation and percent*
0-9	Supervisors of sheltered workshops, 2; supervisors of business enterprises, 8; teachers of arts and crafts, 8; physical education teachers, 9.
10-19	Home economics teachers, 13; kindergarten teachers, 15; industrial arts teachers, 17.

20-29	Placement specialists, 22; home teachers, 23; nursery school teachers, 26; caseworkers (social), 26.
30-39	Elementary school teachers, grades 1-6, 34; music teachers, 35; vocational rehabilitation counselors, 37; assistant directors of agencies (commissions or bureaus) for the blind, 37; secondary school teachers, grades 7-12, 38.
40-49	Directors of agencies (commissions or bureaus) for the blind, 45; supervisors of vocational rehabilitation services, 49.
50-59	Mobility instructors, 53; directors of rehabilitation centers, 53.
60-69	Casework supervisors (social), 60.
70-79	Supervising teachers, 74; supervisors of special education, 75.
80-89	Superintendents of residential schools, 83; principals of residential schools, 86; school guidance counselors, 89.

All of the occupations studied had employees with educational qualifications of a master's degree or higher, with the proportion ranging from 2 percent for supervisors of sheltered workshops to 89 percent for school guidance counselors. Eight occupations reported more than half of the employees as having at least a master's degree. In particular, 15 percent of the directors of rehabilitation centers, and 10 percent of the superintendents of residential schools had doctoral degrees. Mobility instructor was the only nonsupervisory category with more than half the employees having advanced degrees. The two largest categories studied, elementary school teachers and secondary school teachers, had 34 percent and 38 percent, respectively, of employees having attained advanced degrees.

For the survey occupations as a group, the relative numbers of blind and sighted persons, and the relative numbers of women and men were about the same when distributed by educational qualifications.

Additions to Braille Code Are Available

Recommendations for clarifications and additions to the Braille Literary and Textbook Codes submitted by the Braille Authority at the 1966 Conventions of the AAIB and AAWB were unanimously adopted. The materials affecting *English Braille, American Edition* are now available in braille and inkprint; those for the *Code of Braille Textbook Formats and Techniques* are scheduled for completion this month.

Of particular interest to educators and transcribers is the addition to the textbook code of a new section setting forth the symbols and rules of usage for the writing of phonetics in braille.

For the benefit of individuals who already have copies of the earlier editions of the two codes, copies of addendums are being made available separately from the integrated revised 1966 editions.

For further information, write to: American Printing House for the Blind, 1839 Frankfort Avenue, Louisville, Kentucky 40206.

The Retina—Brain Portion of the Eye

STEVEN J. POPOVICH, M.D.

Dr. Popovich is an ophthalmologist and a member of the Board of Directors of the Braille Institute of America in Los Angeles

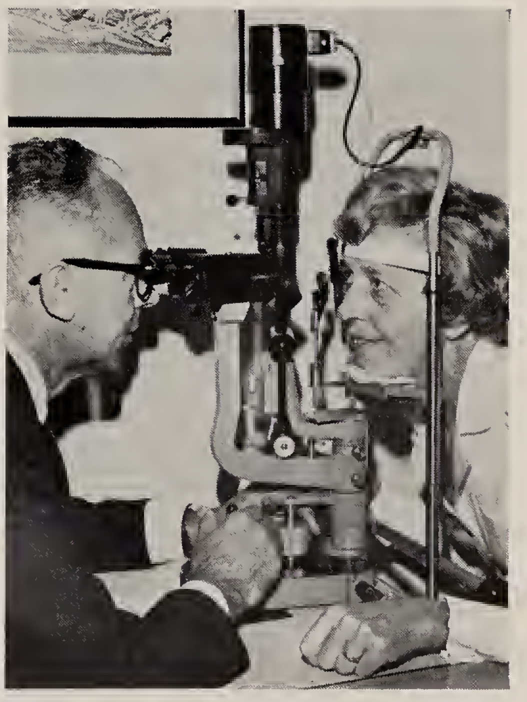
Diseases of the retina are varied and complicated and probably account for more visual impairment or loss than any other portion of the human eye. The retina and its blood vessels are a unique portion of one's anatomy inasmuch as they are the only portion of the vascular and central nervous system that can be examined by the human eye. Ophthalmoscopic examination of the ocular interior can thus mirror one's general health and serve as a diagnostic tool for the interpretation of many different systemic diseases. That is why it is important for the ophthalmologist to dilate one's pupils, so that he can thoroughly explore and examine the contents of the eye and diagnostically interpret what he sees. This is impossible by any other procedure, or through an undilated pupil.

The retina is the primary important tissue of the eye with respect to visual function. It receives the image and transmits it to the primary visual centers of the brain through a complex arrangement of neural fibers. The retina is actually a portion of the brain, enveloped within the outer coats of the eye in early embryological development. Its vascular supply is essentially from the intracranial blood vessels. It is the innermost layer of the eyeball, covering about two-thirds of the posterior portion of the globe. A very delicate and complex structure, about the consistency of wet Japanese silk paper, it is attached to the vitreous gel inwardly, and outwardly to the middle or vascular coat of the eye (choroid). It receives its nutrition from the retinal vessels and the choroidal vascular layer.

Diseases of the retina may be primary, or the retina may be involved secondarily in diseases of the vitreous gel or adjacent choroid. The destruction of its tissues by any pathological process results in degenerative and irreparable damage. The retina never heals or regenerates itself to the point of restoring visual function. This is very much like the pathological processes within the brain.

The retina covers a large portion of the inner eye, although only a small area —about the size of the head of a straight pin, situated at the posterior pole of the eye—is of utmost visual importance. This area is called the macula, which functions to serve us with our fine or central vision. The remainder only serves us with peripheral vision and helps our ability to adapt to darkness.

It is the location of the retinal lesion that determines the amount of visual impairment. A lesion of the minute macular area is always associated with some visual reduction; if it is severe enough it can completely destroy our reading or fine vision and leave us with a central void or blind spot in the visual field. The patient then learns to use his peripheral vision to get about. A lesion involving the peripheral portion of the retina may be present without the patient being



This article is reprinted through the courtesy of *Light Magazine* (Autumn 1966) and the Braille Institute of America, Inc.

aware of any visual symptoms. On routine ocular examination, it is not uncommon to find many patients with such peripheral lesions, some of significance and others with none.

The Aging Human and Senile Degeneration of the Macula

☐ One of the greatest problems confronting the aging human being is senile degeneration of the Macula. With the increase in man's life span, it is becoming one of the more common causes of failure of central vision in older people. This condition was first described about one hundred years ago, and despite the tremendous amount of research and study since then, the ophthalmologist has little to offer the patient.

The condition is characterized by a gradual degeneration and destruction of the macular portion of the retina. It usually commences in one eye, but eventually involves both eyes. It is thought to be a result of poor circulation and nutrition to the retina's macular portion, which is secondary to the aging process or "hardening of the arteries." The disease is fortunately limited to the macular region of the retina, leaving the remainder portion uninvolved.

Such degenerative changes develop very slowly over a period of years unless dramatically accelerated by the development of retinal or choroidal hemorrhages. After running its course, however, the disease leaves a dense central blind spot and, despite treatment, becomes permanent.

Many forms of treatment have been given for this condition, but unfortunately all such forms of therapy have been unsatisfactory. Thus far the condition is not responsive to medical control.

Optical Aids May Help But Eventually Vision Diminishes

☐ Optical aids such as magnifying glasses, telescopic lenses, etc., may tide the patient over for a while, but eventually the central vision diminishes. All fine work and reading becomes more and more difficult, and eventually impossible. The peripheral field of vision remains, but it is surprising how, with time, patients adjust to this type of vision and get along very well. The condition never leads to total blindness.

It is because of a previous disease of the macula or macular degeneration that patients, after undergoing cataract surgery, are unhappy with their visual results. If the cataracts are not too cloudy, the retina can be examined and the patient forewarned. But if the cataracts are so cloudy that the interior of the eye cannot be seen, the results cannot be determined until after such surgery. However, on many occasions, patients have been happier with some peripheral vision than with no vision at all.

NEXT MONTH: The May issue of the *New Outlook* will include articles on intermarriage among the blind; a more efficient method of teaching braille; the expression of emotion by the blind; and the role of press relations in a community relations program. "Hindsight," the controversial column, returns to comment on blindness and technology.

Report from Washington

At press time in the middle of February, the Ninetieth Congress was in the process of completing its organization into committees and subcommittees. A list of the membership of committees that handle legislation of interest to readers will be distributed as soon as assignments to subcommittees have been completed.

In the various Presidential messages sent to the Congress this year, there are several recommendations for legislation of concern, notably in public welfare and Social Security. The President indicated that he would ask for an extension of the public welfare amendments of 1962, which were designed to give the public assistance programs a rehabilitative and preventive emphasis. Legislation will also require the states to increase their public assistance payments at least to the minimum standards they have set with authorization of additional federal funds for this purpose.

The President has recommended an increase in Social Security cash benefits for all categories of recipients. He has also requested cash benefits for severely disabled widows, upon death of their husbands, rather than requiring them to wait until they are 62 years old. In addition, he has recommended that disability insurance beneficiaries be made eligible for medicare under Title XVIII. Another improvement requested would meliorate the crippled children's and child welfare programs under Title V of the Social Security Act.

All of the recommendations for improvements in the public welfare and Social Security programs, including funds for the training of social workers, are expected to be submitted in a single bill by late February.

Appropriations

It is expected that appropriations for the fiscal year ending June 30, 1968 will be kept at a reduced level with the Administration deferring expenditures as much as possible, especially for construction.

A few examples in some of the new programs are indicative of the Administration's effort. For Title VI of the Elementary and Secondary Educational Act, the Congress authorized $50,000,000 for fiscal 1967 and $150,000,000 for fiscal 1968. For this vital program of grants to the states for the education and training of handicapped children, the Administration requested $2,500,000 for fiscal 1967 and $15,000,000 for fiscal 1968.

For the new program of grants to the states for library services to the physically handicapped under Title IV B of the Library Services and Construction Act, the supplemental appropriation of $250,000 for fiscal 1967 was limited to the development of state plans. Congress authorized $4,000,000 for fiscal 1968 for this program, but the Administration requested only $1,320,000.

The Library of Congress has requested $6,085,000 for the Books for the Blind and Physically Handicapped program. The actual appropriation for the current fiscal year was slightly under $4,600,000.

The House Committee on Appropriations had not begun hearings on specific programs at press time.

Miscellaneous

Senator Lister Hill (D—Ala.), chairman of the Senate Committee on Labor and Public Welfare, has introduced S. 325 for himself and 49 other senators. This bill would provide for the establishment of a National Eye Institute at the National Institutes of Health to provide more effectively for research into the cause, cure, and prevention of eye diseases and related health problems associated with blindness. More than 15 similar bills have been introduced in the House of Representatives, including H.R. 586 by Rep. Samuel N. Friedal (D—Md.), second ranking Democrat on the House Committee on Interstate and Foreign Commerce, to which these House bills were referred.

Rep. Cecil King (D—Calif.) has introduced H.R. 3064 at the request of the National Federation of the Blind. This bill would make it possible for blind persons within the 20/200 legal definition of blindness to become eligible for disability insurance cash benefits with a minimum of six quarters of employment covered by Social Security and without regard to their ability to engage in substantial gainful activity. An identical bill was passed by the senate in both the Eighty-eighth and Eighty-ninth Congresses.

At the request of NFB, Congressman King has also introduced H.R. 3065 to eliminate durational residence requirements for public assistance payments to blind persons and H.R. 3066 to eliminate relatives' responsibility as a factor in public assistance payments to blind persons.

Rep. Hugh Carey (D—N.Y.), who served as chairman of the Ad Hoc Subcommittee on the Handicapped during the Eighty-ninth Congress, has introduced H.R. 14 to provide comprehensive services for the education of handicapped children. The bill would extend Title VI of the Elementary and Secondary Education Act, provide for the development and distribution of special instructional materials, establish exemplary educational programs, extend and expand provisions for training special educational personnel as well as for research and demonstration projects, and assist states to strengthen their administration of special education programs for handicapped children at both state and local levels.

I.P.S.

Editorial Notes

Sixty Years of the Outlook

Just below this column, a section candidly titled "Confessions of the Founder" carries extracts of an article that Charles F. F. Campbell wrote on the twenty-fifth anniversary of his founding of the *Outlook for the Blind.*

This issue marks the sixtieth anniversary of the magazine, and the anniversary, quite naturally, occasioned a look back through the sixty volumes.

We debated ways of marking the anniversary, and when we found Mr. Campbell's reminiscence, which neatly sums up the state of work for the blind at the turn of the century (as well as giving the early history of the magazine), we decided to reprint parts of it.

Many of the problems Mr. Campbell mentioned are still with us, and one of the most compelling is that which he termed "practical training of blind persons to make their ultimate placement more certain."

Mr. Campbell said in 1932, "The need [for practical training] of a quarter of a century ago remains as vital as ever and the solution of that need rests, as it did then, in the hands of those to whom is entrusted the education of our blind youth." He then reiterated the request he had made in his very first editorial in 1907—for everyone concerned to "reason together."

The need for reasoning together and exchanging ideas and information remains in 1967, and the *New Outlook* continues to serve as a medium of communication. We trust it will still be functioning in this capacity ten, twenty, fifty years from now and still following the principles and goals of its founder.

Rubella

Speaking of education, we want to call your attention to the article on page 106 dealing with the very special educational problems and needs of rubella-blinded children. It sets forth the problem and challenge that face us in the immediate years ahead.

The problem is urgent and requires the utmost in ingenuity and resources. Certainly it is time, in Mr. Campbell's words, for those concerned to reason together.

Dr. Waterhouse's article, and the one by Mrs. Wagner, are the first we have carried on rubella since the epidemics of 1963-65, but they will not be the last. As plans for dealing with these severely handicapped children materialize, the *Outlook* will report them.

While the problem is an immense one today, it appears that we will not again face a large influx of rubella-blinded children. As Mrs. Wagner points out, a vaccine for rubella is in the offing and will probably be available before the next major epidemic, expected about 1970.

We might, by the way, say a word about Mrs. Wagner's article. It departs somewhat from our usual pattern in that it does not deal with some specific aspect of blindness. We are publishing it because there is considerable confusion about what rubella is and what its effects are. Since we will be seeing many rubella-blinded children in the next two or three years, it seems logical to offer a summation of the cause of the problem.

P. S. S.

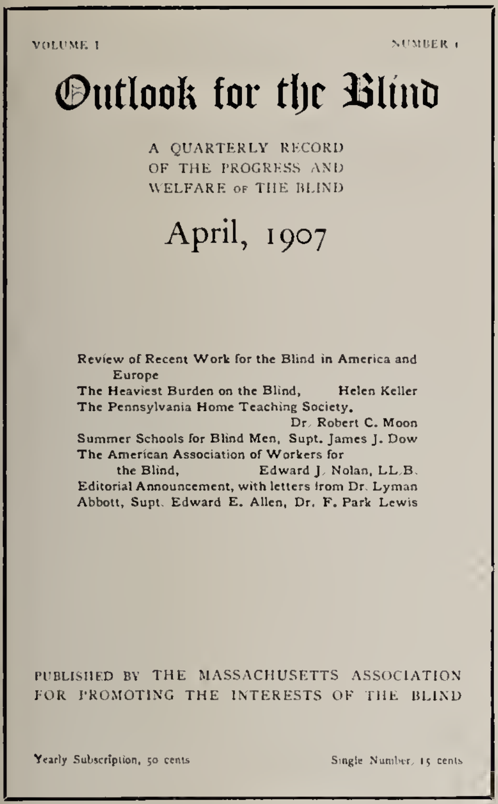
Confessions of the Founder—After 25 Years

Charles F. F. Campbell

Following are extracts from an article that Mr. Campbell wrote on the twenty-fifth anniversary of the founding of the Outlook for the Blind. It appeared in the March 1932 issue. Mr. Campbell was founder and first editor of the magazine.

. . . . As a result of my four years' active work for the blind in Massachusetts and of many visits to various institutions for the blind, I felt that every such organization had something to contribute to the well-being of persons thus handicapped. The fact that agencies for the blind are widely scattered, often not more than one or two in a state, meant that an improved method or device might easily be used for years in a school or shop and never heard of in even the next state.

Perhaps it was the thought of bringing together such suggestions for the benefit of all, which stimulated my belief that a national magazine, published in the interests of all the blind, would be of real service. In addition to this I knew, and had the greatest respect for, Mr. Joel W. Smith, then a member of the staff of Perkins Institution, who, for four years, had published a monthly magazine known as *The Mentor*, and I had been told by some of the most thoughtful workers for the blind that they felt its discontinuance to be a serious loss to the profession. Because I



VOLUME I NUMBER 1

Outlook for the Blind

A QUARTERLY RECORD
OF THE PROGRESS AND
WELFARE OF THE BLIND

April, 1907

Review of Recent Work for the Blind in America and Europe
The Heaviest Burden on the Blind, Helen Keller
The Pennsylvania Home Teaching Society, Dr. Robert C. Moon
Summer Schools for Blind Men, Supt. James J. Dow
The American Association of Workers for the Blind, Edward J. Nolan, LL.B.
Editorial Announcement, with letters from Dr. Lyman Abbott, Supt. Edward E. Allen, Dr. F. Park Lewis

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FOR PROMOTING THE INTERESTS OF THE BLIND

Yearly Subscription, 50 cents Single Number, 15 cents

was twenty-five years younger than I am today, and did not realize the impossibility of turning back the hands of the clock so far as the date of publication is concerned, I blithely started to publish the *Outlook for the Blind.* I received a modest subsidy from the Massachusetts Association with the distinct understanding that this would be discontinued at an early date if reasonable support should not be forthcoming from allied workers in other parts of the country.

Several superintendents, notably Edward E. Allen, John F. Bledsoe, Olin H. Burritt, and Thomas S. McAloney, immediately came forward and promised annual subscriptions for twenty-five or more copies of the magazine, which meant a substantial guarantee for the printer. In addition to this, a considerable group of wealthy friends of our general cause promised regular annual support . . . .

After Graduation—What?

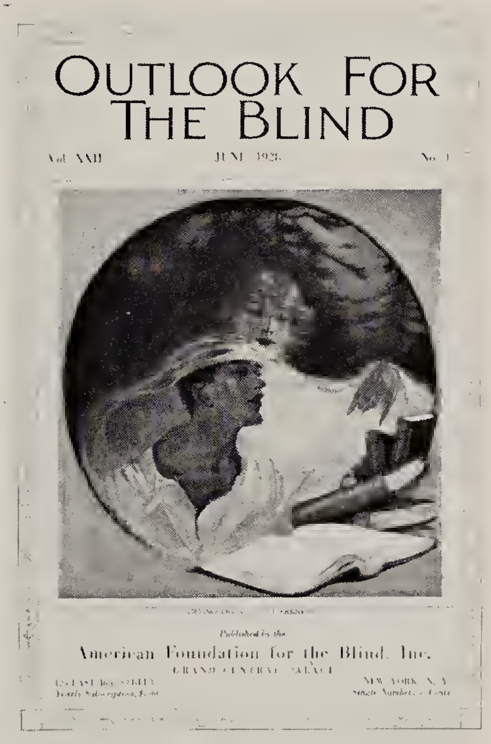
To understand my next confession the reader must recall that I was born and spent my youth in a school for blind people. Even as a little boy I had become impressed by the fact that my father's success in raising money for the operation of the Royal Normal College depended almost entirely upon the success of his graduates. . . . .

Having lived in the United States since my boyhood I had become accustomed to the American principle that every child is entitled to an education and also, to what is even more significant, the fact that neither public school nor college authorities then felt themselves particularly concerned about the after-success of their graduates. In a country which held such a point of view, it was only natural that handicapped children should be provided with similar educational opportunities and no after-care. The blind, the deaf, the feeble-minded and the crippled were accepted by legislators as eligible for the best possible education.

With this point of view thoroughly ingrained in the average American, it was only reasonable that the superintendents of American schools for the blind should be content if they could train their students to such an extent that their graduates compared favorably with the young people who graduated from schools for the seeing. The early pioneers in American schools for the blind recognized that the avenues of employment for their pupils after graduation were exceedingly limited, and made valiant efforts to introduce some trade training into their schools. But, by the close of the century, most of the leaders in educational work for the blind in this country were leaning more and more toward the conviction that, if they gave their students the finest academic training, they had adequately fulfilled their mission as educators.

With the beginning of the twentieth century some of the outstanding leaders in the work began to ask very pertinent questions and we witnessed the beginning of the creation of state commissions and privately-supported organizations devoted to the interests of the adult blind. Edward E. Allen, then principal of the Pennsylvania Institution for the Instruction of the Blind, Overbrook, was so impressed with the question, "After graduation—what?" that he appointed Mr. Liborio Delfino as field officer for the institution and one of the finest pieces of work of its kind resulted from the earnest effort to ascertain just what was becoming of the graduates of one of America's oldest and finest schools. . . . . About this time [1904] several of the commissions and associations for the adult blind, which came into being shortly after 1900, were being confronted with the unanswerable fact that a considerable proportion of the young men and almost all of the young women who had graduated were having a desperate struggle to earn a living.

I have dwelt upon this fact in an effort to give the background which impelled me to send out a questionnaire to secure statistics about every school for the blind in America. This information was printed in the *Outlook* in 1908. Many months of endless labor were spent upon the gathering of this material which not only gave details of the equipment and curricula of the schools, but also asked the question, "After graduation—what?" Very few schools answered that; indeed, they could not do so because they did not have the facts. The editor hoped the questionnaire would serve as a mirror into which those directly responsible would look carefully. Unfortunately the belief of the layman that



OUTLOOK FOR
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all was being done that could be done for the "poor blind children" was too strong, and very little if anything happened. The mirror was either not looked into or, if it was, the user was quite satisfied with what he saw. . . .

Practical Training for Blind Girls

One of the most startling facts brought out by the questionnaire to which I have just referred, was the revelation which came from many of the superintendents with regard to the hopeless outlook of the young women graduates. When I summarized the answers, I was amazed to find they admitted that over 95 percent of all the young women who passed through their schools returned to their homes. Of course we had heard about the brilliant and exceptional young women who had risen to prominence in one field or another, but I felt keenly that it was most unfair to ignore the fact that nearly all female graduates of the schools were too poorly equipped to take their places even as active members of the household. With this in mind I strove through the magazine to stimulate educators to strengthen their courses in domestic science. I never lost an opportunity, either editorially or by use of illustrations from schools where domestic science was strongly favored, to urge the enlargement and spread of this field of instruction. . . .

Type War and Prevention of Blindness

It is not necessary to do more than refer to the campaign for the prevention of blindness and the intense controversy over the type question.

From the very hour the campaign to reduce unnecessary blindness as a result of ophthalmia neonatorum was started, I spared no effort to publish articles and reproduce printed matter which the various agencies prepared upon the subject.

It is indeed gratifying that this merciful campaign has had such remarkable results. The best reward to those who have so valiantly striven to save sight is the amazing fact that today comparatively few babies are needlessly blind.

Soon after the *Outlook* appeared, the "battle of types" was started. We all remember what a bitter contest that was. The position of the editor during that time was exceedingly delicate. I was presumed to favor braille because I had been brought up under that system. The best proof that I successfully steered the magazine through those troubled waters was the cordial letter I received from the late William B. Wait, father of the New York point system, in which he not only congratulated me but thanked me for the constant fairness with which I had reported the controversy. I frankly admit his letter was very gratifying and perhaps my most valued reward.

In the light of the many advances which have been made in behalf of the blind, in the prevention of blindness, in reading material, etc., during the past twenty-five years, it is perhaps the more striking that so little progress has been made in vocational training and placement of the blind which is certainly no less important. I inherited from my father and mother the conviction that no school for the blind had completed its mission until it had done its utmost to place its graduates in the remunerative positions for which they were best fitted. I have devoted the best years of my life to this problem and it is for this reason that I deliberately chose to use the space allotted to me by the editor to refer at such length to the way in which I strove to foster these ideals in the *Outlook for the Blind*.

National Clearing House for the Blind

After the *Outlook* was firmly established, innumerable requests for information came constantly to the editor's desk. During one month alone I received inquiries from nearly every state in the Union. The questions ranged all the way from how parents of a blind child should adjust themselves to the tragedy, to where the best provision might be found for a blind grandparent.

Almost every one of our workers has received similar inquiries, but the magazine's office, which was little more than a desk, became an ever increasing source of information to a larger and larger numbei of people, who either needed service for or wanted to give service to the blind.

At the time the magazine was established I was asked to serve as secretary of the American Association of Workers for the Blind, which office I held for twelve years. This gave me an unusual opportunity to become better acquainted with our workers all over the country, and the magazine frequently printed extensive material from the reports of conventions. Indeed, upon certain occasions it made itself responsible for the publication of the *Proceedings*.

All of these co-operative efforts made it increasingly clear that a national agency of some kind was sorely needed and I hoped that the *Outlook for the Blind* would help to foster this feeling. After the beginning of the World War the problem of financing the publication was very serious and many times I was asked if I did not think it would be better to let it die a natural death. During those dark and trying days almost the only thing that stimulated me to continue the magazine was the firm conviction that a national organization for the blind was bound to come and I kept on in the faith that when such an institution came into being one of its first functions would be to carry on the *Outlook for the Blind*.

That faith has been more than justified, and after sixteen years of gratuitous and often extremely arduous toil I turned the magazine over to the American Foundation for the Blind, which has continued to publish it. . . .

News in Brief

■ A blind radio-television newsman and jazz musician will be honored on April 27 as Handicapped American of the Year for 1966. Art Edgerton, an inhabitant of Toledo, Ohio, will receive the President's Trophy at the annual meeting of the President's Committee on Employment of the Handicapped, in Washington, D.C.

Mr. Edgarton, 38, works on the news desk of WTOL Radio and TV in Toledo, where he writes news for late night and morning broadcasts. He holds a B.A. in Sociology from St. Joseph's College in Philadelphia, an M.A. in Sociology from Fordham University, and a B.A. in Music from the Julliard School of Music.

Mr. Edgarton has been active in promoting employment of the handicapped in his home state of Ohio, and has been cited for his determination and the outstanding example he has set for other handicapped people.

■ Nine regional Rehabilitation Research Institutes designed to concentrate nine basic areas of research in university-oriented centers throughout the United States have been established by the Vocational Rehabilitation Administration.

The Institutes were set up to overcome communication barriers and prompt state rehabilitation agencies to become curious about their operational problems which might be subject to research.

The Institutes are at Northeastern University, Boston, Massachusetts; the New York State School of Industrial and Labor Relations, Cornell University, Ithaca, New York; the University of Maryland, College Park, Maryland; the University of Florida at Gainesville, Florida; the University of Wisconsin, Madison, Wisconsin; the University of Missouri, Columbia, Missouri; the University of Oklahoma, Norman, Oklahoma; the University of Utah, Salt Lake City; and the University of Washington, Seattle.

■ A professional placement service will be featured at the 1967 Annual Forum of the National Conference on Social Welfare to be held May 21-26 in Dallas, Texas.

The placement service will be provided by the U.S. Employment Service and its affiliated state employment services. The Texas Employment Commission will serve as the host agency.

A staff of placement specialists will assist applicants and employers attending the Forum. A file of applications for employment will be available for review by employers seeking staff, and descriptions of position openings will be available to applicants seeking positions.

Applicants and employers attending the Forum should complete registration for placement at the nearest placement office of their state employment service before May 5. Applications will be accepted during the Forum, but persons filing in advance will receive expedited service.

■ The Braille Institute of America has recently completed a series of nine weekly seminars planned to assist families of the sightless. Each seminar provided information helping sighted family members understand the necessity for informed cooperation at home.

The series involved discussions of orientation, mobility, education, and emotional problems in connection with the congenitally and adventitiously blind.

Five sessions were directed to parents of blind children; four were for relatives of blind adults.

■ The American Foundation for the Blind has appointed Mrs. Françoise Pascual as director of the Bureau of Direct Aid in its Community Services Division.

Mrs. Pascual, who holds a professional diploma in nursing and a Diplome d'Etat d'Assistante Sociale with highest honors from the Ecole Pratique de Service Social in Paris, will be chiefly responsible for operating the Foundation's national information and referral service.

■ A Bureau of Education for the Handicapped has been established in the U.S. Office of Education to strengthen and coordinate activities in behalf of the handicapped.

The new bureau's mission is to assist states, colleges, and universities, and other institutions and agencies in meeting the educational needs of the nation's 5 million handicapped children who require special services. These children are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or have other health problems or major learning difficulties that can be helped by special education and related services.

The new bureau will encompass the existing programs which the Office of Education conducts expressly for the handicapped, such as support of training for teachers and other professional personnel to participate in the education of the handicapped, grants for research in this field of education, and operation of the Captioned Films for the Deaf project. In addition, the bureau will administer a new program of financial aid to help states initiate, expand, and improve their resources for the education of the handicapped.

Dr. J. William Rioux, recently named acting director of planning and evaluation for the bureau of Elementary and Secondary Education, is temporarily in charge of the bureau.

■ An eight-month computer programmer training course for blind persons is being conducted by the International Academy, Inc., in Brentwood, Maryland. Similar projects are currently underway in Pittsburgh and Cincinnati.

■ Sara Lee Berkman has joined the National Conference on Social Welfare as an assistant executive secretary in its New York City offices. Previously, she was with the National Council of Jewish Women as head of the Community Services Department.

■ Pilot Dogs, Inc., has trained one animal to work with two blind people, either individually or as a couple. The dog belongs to DeWayne and Virginia Baker, and was trained by Stanley Doran.

Coming Events

April 12-14 National Society for the Prevention of Blindness, Columbus, Ohio

April 27-28 President's Committee on Employment of the Handicapped, Annual Meeting, Washington, D.C.

May 4-7 National Braille Association, Marriott Motel, Saddlebrook, N.J.

May 21-26 National Conference on Social Welfare, Dallas, Texas

July 9-12 American Association of Workers for the Blind, Miami Beach, Fla.

August 1-5 Blinded Veterans' Association, Hartford, Connecticut

August 21-27 International Conference of Educators of Blind Youth, Boston, Massachusetts

August 31-Sept. 5 American Psychological Association, Washington, D.C.

October 1-5 National Rehabilitation Association Annual Conference, Cleveland, Ohio

October 23-27 American Public Health Association, Miami Beach, Fla.

Current Literature

Influence of Teaching and Exercise on Development of Ability of Introspection and Making Statements of Blind Pupils by Gojko Zovko. *The Educator* (Edward J. Waterhouse, Chairman Executive Committee, International Conference of Educators of Blind Youth, Perkins School for the Blind, Watertown, Massachusetts 02172), No. 6, December 1966, p. 13-19. $1.00 (covers all issues from No. 1 to 7). Mr. Zovko is a professor of teaching methods for the blind and visually handicapped at the High School of Defectology, University of Zagreb in Yugoslavia.

An Approach to the Problem of Integrated Education of Blind Children by Dr. Franjo Tonkovic. *The Educator* (see above for acquisition information), No. 6, December 1966, p. 23-26. Dr. Tonkovic is Head of the Department of Education of the Blind and Visually Handicapped, High School of Defectology, University of Zagreb, Yugoslavia and Vice-President of the Union of the Blind of Yugoslavia.

The Typhlological Museum in Zagreb Helps in Education of the Blind by A. Rudomino. *The Educator* (see above for acquisition information), No. 6, December 1966, p. 20-22. Mr. Rudomino, the Director of the Typhlological Museum, Union of the Blind of Yugoslavia in Zagreb, explains how his museum not only serves as a place of instruction for the blind, but also helps sighted persons gain a better understanding of blindness.

The Vision Needed to Nurse the Blind by C. Warren Bledsoe and Russell C. Williams. *American Journal of Nursing* (10 Columbus Circle, New York, New York 10019), Vol. 66, No. 11, November 1966, p. 2432-2435. Two nationally known leaders in rehabilitation advise nurses as to how they may help their blind patients develop initiative.

The Blind Patient Need Not Be Helpless by Barbara Oerther. *American Journal of Nursing* (see address above), Vol. 66, No. 11, November 1966, p. 2436-2439. The story of three blind psychiatric patients and the challenge they presented to the nursing staff.

Workshops for the Handicapped: An Annotated Bibliography, No. 3, compiled by Dorothy C. Perkins, with the assistance of Ronald S. Burns and Edith N. Marcus. California State College at Los Angeles, September 1966. 47p. (Copies available from National Association of Sheltered Workshops and Homebound Programs, Federal Building, Suite 430, 1522 "K" Street, N. W., Washington, D. C. 20005 for $1.00 to cover postage and handling). The third issue of this continuing bibliography updates the literature through May of 1966. Two special articles dealing with the social service and the business roles of workshops are presented. M.M.R.

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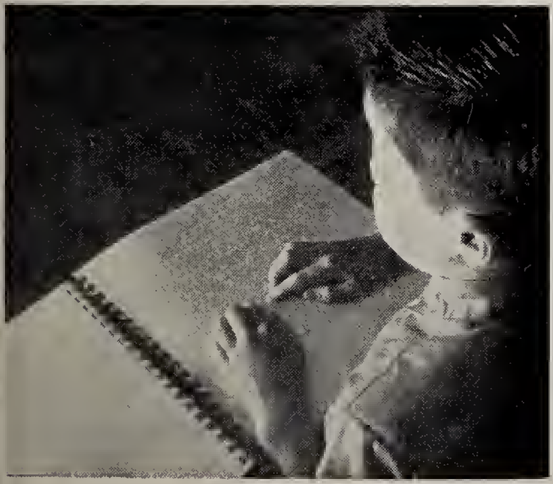

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THE NEW
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FOR THE BLIND

On Intermarriage Among the Blind
Fareed Haj

A More Efficient Method of Teaching Braille
Claudell S. Stocker
Mary J. Walton

The Expression of Emotion by the Blind
Leslie M. Clark

May 1967 Volume 61 Number 5

THE NEW
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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

Assistant Editor
Francis P. Naughton

On Intermarriage Among the Blind

FAREED HAJ, M.S.

Mr. Haj, who has been blind since birth, is married to a sighted woman and has two young sons. He will receive a Ph.D. in Vocational Rehabilitation Counseling from New York University this spring

Intermarriage among the blind has been subjected to little research and reporting. This may be due partly perhaps, to two reasons: the personal nature of the topic, and vestiges of a belief among educators and others concerned with the blind that such marriages are undesirable. In view of this lack of investigation, the following preliminary exploration of intermarriage is offered for consideration.

Until recently, people in charge of welfare programs for the blind were of the opinion that the blind should not intermarry. Indeed, articles had to be written to justify the right of the blind to marry at all. In England, as late as 1930, Captain Ian Fraser was denouncing British plans to sterilize blind persons who intended to be married and to cut off financial assistance to blind individuals who would not cooperate in sterilization.[1] In 1937, Marjorie Charnwood, a British blind woman, was suggesting that it *may* be all right for a blind man to marry a sighted woman, and even for a blind woman to marry a sighted man. She felt, with some reservations, that such marriages might be happy. She even dared suggest that an intermarriage between two blind people would be permissible, if the couple was in love—but added that she was ready to stand corrected on the latter point.[2]

In addition to this consensus against intermarriage, there existed, during the long period when the blind were educated only in institutions, strict segregation of the sexes within the institutions. Fearing the arousal of interests which might lead to intermarriages, educators never mentioned sex in or out of the class, and any pupil who broke the rules of segregation was promptly expelled.[3] An unhealthy attitude toward sex and an excessive preoccupation with the subject developed in pupils. Those who graduated into other segregated adult institutions never recovered a salutary mental position in connection with the subject.[4]

Through their efforts to prevent intermarriages, educators of the blind thought they were doing their students a service by hindering an action that was injurious to a blind person's happiness. They reasoned that intermarriage would make it doubly difficult for a couple to become economically self-sufficient, that it would increase the number of blind beggars, and that it would lead to the birth of many children who would inherit their parents' disability.[5]

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[1] "The Blind and Marriage," *Beacon*, 14:165 (September, 1930), p. 186.

[2] Charnwood, Marjorie: "Should Blind People Marry," *Beacon*, v. 21, 173-174, July, 1937.

[3] Marks, Robert: "The Blind Demand the Right to Marry," *Physical Culture*, v. 79, p. 58, February 1938.

[4] Cutsforth, T. D.: *The Blind in School and Society*. New York: American Foundation for the Blind, 1951, 156-157.

The Blind Person was Woefully Ignorant of Sex Information

☐ Until lately, the blind person, upon leaving his segregated school, was woefully ignorant of sex information. During years when the sighted child was gathering knowledge through watching little children of both sexes being bathed, through pictures, and through other visual observations, the blind child had nothing to fall upon except ideas imparted by equally ignorant fellow students.[6] After school, an agency took over his rehabilitation and training. Here, most of the blind person's contacts remained with his former blind friends and with other new blind trainees in a sheltered workshop or other comprehensive rehabilitation facility. And here, intermarriage was still discouraged.

An Unnatural Segregation Did Not Help In Normal Emotional Achievement

Finding himself continually with other blind persons, the graduated student would join a club to which members of his sex belong. He would also swim and go to the summer camp assigned to his sex. This unnatural segregation did not help in the normal emotional development of the person.[7]

When by chance blind people of both sexes were thrown together, they often formed quick attachments imagined to be love, since they had no previous experiences with which to make comparisons.

Many Intermarriages were Taking Place Each Year

☐ While the experts were saying that intermarriage ought not to occur, many marriages between blind persons were, in fact, taking place each year.[8] With or without blessings from all concerned, hundreds of such intermarriages take place in each generation.[9] These come about in a much more significant percentage of the blind population than would at first appear. Half of all the blind are over sixty-five years of age; another 15 percent are in their fifties. An additional 10 percent are of school age and are too young to marry.[10] This means that 75 percent of the blind do not enter into estimation, either because they are too young, or because as adventitiously blind older citizens, they married or decided not to marry prior to the onset of their disability. Of the 400,000 blind persons in the United States, only 100,000 or 25 percent are eligible for discussion. Among these, many between the ages 21 and 50 are adventitiously blind and married while they were still sighted. Finally, statistics have shown that among congenitally blind young people, only one person out of four does marry. Fewer women than men marry.[11] Most of the group under consideration, then, does not marry. This makes the few hundred cases of intermarriage very significant. Why is it that, in the face of disapproval, so many intermarriages did, and still do, take place?

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5. Dr. Allen: "On Intermarriage of the Blind," *Teachers Forum*, v. 11, p. 30, November 1938.
6. Marks, *op. cit.*, p. 36.
7. Cutsforth, *op. cit.*, p. 158.
8. Marks, *op. cit.*, p. 58.
9. Best, Harry: *Blindness and the Blind in the United States.* New York: MacMillan Company, 1934, p. 208.
10. *Encyclopedia of Social Work*, New York: National Association of Social Workers, 1965, p. 102.
11. Best, *op. cit.*, 206-207.

One obvious reason is that many of the blind spend more time in the company of other blind persons than in the company of sighted persons. As affection requires cultivation and time, people usually fall in love with those they have most access to—fellow students, fellow workers, or fellow church members.

One Reason Why: the Blind Spend More Time with Other Blind Persons

The fact that many blind people spend so much time together, added to the greater ease with which a blind couple can communicate in confidence and security are important factors in bringing so many sightless couples to the altar; but there are other contributing factors too.

Finding his place in society requires of the blind individual uncommon ability. It is harder for him to be accepted by the world at large than it is for him to fit into the closed society of the blind. Many a blind person who comes, driven from his home by a volunteer or a friend, to an agency, is far from being an independent traveler. It is one thing to be picked up and chauffeured to an organization where one can meet other blind clients, and another thing to travel freely and at will in public places. Blind people who do not master mobility have very few chances of meeting suitable sighted people of the opposite sex.

There may Be a High Correlation Between Intermarriage and the Time Blind Couples Spend in An Agency

A careful investigation may very well reveal a high correlation between intermarriage and the amount of time blind couples spend within the confines of an agency for the blind. Such an investigation may also show a high inverse correlation between the length of stay within an agency program and the social and vocational success of the blind individual.

It would then follow that those who take most advantage of the greatest number of agency programs are those most likely to contract marriage with blind mates and those less likely to establish many contacts in the outside community. Those thus sheltered from the community will probably have been offered such refuge because of serious limitations, limitations which, perhaps, make them less able to contribute greatly to the outside world. A male, so sheltered, may bear feelings of inadequacy and may shy away from expressing his affections to a sighted girl who has a wider circle of friends to choose from; he may, however, feel more free to speak his mind to a blind girl whom he deems as limited as himself and whose attitudes he can better gauge. According to one view, the blind, in general, avoid expressing deep emotion because they cannot accurately capture the manner in which their advances are being received.[12]

Moreover, just as the sighted look for common interests to bind them together, so the blind also look for common interests. It is possible that the blindness of two people may be enough of a binding force to bring them together. This mutual interest may lead to a marriage, one which need not prove unhappy. According to one psychoanalyst who has worked extensively with the blind, such intermarriages are usually happier than those in which only one partner is sightless.[13]

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12. Cholden, Louis: *A Psychiatrist Works with Blindness.* New York: American Foundation for the Blind, 1963, p. 30.

13. Marks, *op. cit.*, p. 58.

Difficulties in Establishing Pre-Marital Associations with Sighted People

☐ Undoubtedly, many of the factors leading to intermarriage among the blind arise from difficulties which blind persons face in establishing premarital associations with sighted people. In discussions about the marriage of blind persons to sighted persons, much time has been devoted to proving the blind can be good parents, capable homemakers, and adequate providers. But a major part of the problem does not all lie in how well blind persons function after marriage. A significant obstacle to marriage with a sighted partner lies in getting a chance to meet and fall in love prior to the event. To be given the chance by sighted persons to prove themselves is the difficulty facing many of the blind. The situation is analogous to that obtaining in industry.

The Blind Must Often Excel if They Are To Be Preferred by the Sighted

Since the blind are, by the nature of their disability, more limited in social, vocational, and economic potential than the sighted of comparable age and background, it is often the case that blind persons must excel in some area if they are to be preferred by sighted mates over other suitors. Love may be amblyopic, but until it reaches that stage, it must have grown on something. It is not enough for the blind man to be as good as the sighted man if he is to be chosen by a sighted girl. Because the blind man is more limited, he must be superior to her other admirers. He must have some strong attributes which compensate for his drawbacks. After a time, when love has been established, limitations may weigh very little with the girl in reaching her final decision. In short, a blind man may have to be superior to attract the above average or even the average girl, and average to attract the average or below average lady.

A Disparity in Age or Intellectual Attainment

This same observation was made some thirty years ago by a psychoanalyst who maintained that there is usually a great disparity in age or intellectual attainment between the blind partner and his mate.[14] Naturally, the above-average blind person, as the above-average sighted person, is not in the majority; hence, for many blind people the chance of marriage to a sighted partner is not open, and intermarriage is the only recourse. This need for intermarriage is more true of blind women than of blind men, since it appears that there are fewer such women who have sighted husbands than there are blind men with sighted wives.[15]

Not every blind person mated with a sighted individual is superior, nor do intermarriages occur only among less capable people. Many a capable blind person, during a period of maximum contact with other blind clients at an agency, falls in love and marries a sightless partner. This person might have been able to court a sighted mate successfully, had he waited until his rehabilitation and initiation into society was completed. The reason for such an intermarriage is not the inability of the people involved, but the timing of the marriage, which may or may not have taken place had a few additional years of successful living in society intervened. Both capable partners in such a marriage have, in a way, been cheated of a richer experience that waiting until full successful rehabilitation could have brought. Even if such a couple still decided to be married after they had become fully productive members of their community, they would have done so with the gratifying knowledge that wedlock was dictated through free choice and not through lack of better opportunity. A study of marriages may prove what many have observed—that the majority of successful blind persons who marry are usually mated to sighted spouses. The blind intermarry because they are thrown together more often and have easier access to one another. They also may feel more at ease with one another. They may feel under less pressure to prove themselves.

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[14] Marks, *op. cit.*, p. 58.

[15] Marks, *op. cit.*, p. 58.

Another Prerequisite: The Sighted Partner Must Do More than A Normal Share of Courting

There is still another prerequisite for the blind who wish to mate with the sighted. Up to a point, the sighted partner must do more than a normal share of courting. Among the sighted, when a boy wishes to meet a girl he follows her, talks to her at every chance, and finds occasion to be with her in the same place. The blind are naturally more limited in their role as aggressive suitors. It is a rare Tom who is blind and who can master sufficient courage to enter a college classroom and call out: "Jane, where are you? I want to sit by you." It is up to the girl to make herself available if she chooses; otherwise, a match is unlikely to take place. If she chooses to do more than her share of courting before real love has developed, it must be because her blind suitor is strong enough in some way to attract her while she has other matches open to her. Unless the blind individual is capable enough to mix with the public, and unless he is attractive enough to influence a sighted female to make herself deliberately available, marriage with a sighted person is improbable.

There are exceptions, of course—such as where a blind man is interested in a relative or a family friend whose telephone number he knows or whose house he can visit freely. There also may be the few exceptions of the well-to-do blind who may be attractive for reasons extrinsic to themselves.

Some Intriguing Questions To Be Answered

☐ Since mobility and vocational opportunities seem important factors in making marriage with the sighted possible, the more sight a legally blind person has, the easier marriage should become. Whether this hypothesis is true can only be logically drawn. What little research there is in this area is decades old, and new data would prove most enlightening and valuable.

Among other intriguing questions about intermarriage among the blind which reliable research can answer are the following: is it true that more blind men than blind women marry? Is it true that more blind men than blind women are married to sighted partners? If so, why? Does the type of education received have any bearing on whether a blind person marries, and whether he chooses a blind or sighted partner? Do intermarriages produce a higher percentage of defective children? Are children of blind couples different in their academic and social achievement from children who have one blind parent or no blind parent? Is the sex of the blind parent relevant to the durability of a marriage and the psychological well-being of the child? One day perhaps, answers will be provided.

The Ultra Sonic Aid for the Blind

LAWRENCE HAPEMAN

Mr. Hapeman is a mobility instructor at the Missouri School for the Blind, located in St. Louis

This writer has attempted to evaluate the Ultra Sonic Aid for the blind as a supplementary mobility device which in effect replaces the cane. He has logged more than twenty hours under blindfold, and has traveled with the device in familiar but extensive areas. As an orientation and mobility specialist who has traveled many hours under blindfold with the cane, initial progress was rapid, but conflicting as well as difficult situations were soon noted. The most notable point is how his professional knowledge and use of basic techniques and concepts aided his mobility to such a high degree that it made it difficult to rely on the device as a source of information concerning his orientation and anticipation of situations such as turns, curbs, and stairways.

While evaluating the aid as a mobility instrument, the main concern was how effectively it detects objects in one's path and informs the blind traveler of possibly hazardous situations. Because of the long range (up to 20 feet), it was possible to increase one's "cultural geography" by identifying objects remote from his line of travel. However, except for very few situations, it is unnecessary to detect objects so far away. This would be supplementary information and of little concern to a blind traveler who solely wishes to navigate from one position to another in a safe, effective, and efficient manner. With this in mind, the writer has used only the short range (0-7 feet) of the aid during his work. He was interested in answering the questions, "Is there something in the line of travel?" and "If so, is there a clear path around it?" He was not concerned with the question "What is it?", except if in rare situations it was necessary to determine a course of action.

To acquire a knowledge of the mechanics of the device and to realize just how it functions, a professional engineer was consulted. The type of ultrasonic wave transmitted and then received by the device after having been reflected from an object is the same, but the time interval makes a difference between the frequency of the wave transmitted and the wave received at any given instant. This difference, which is small, is converted into an audible sound. When the difference is extremely small, a low pitch note is heard informing the user that an object is very close. If the object is far away (e.g., 6 feet), the time for the wave to be transmitted, reflected, and finally received is longer and the difference in the frequency of the wave transmitted and the wave received at any given instant is greater, and consequently, the pitch of the note

Work in connection with this article was done at the Rehabilitation Center for the Blind, Veterans Administration Hospital, Hines, Illinois. The Missouri School for the Blind, where the author is employed, is considering use of the Ultra Sonic Aid to supplement orientation, mobility, and travel training for some children.

This article appeared in the December 1966 issue of the Mobility Interest Group *Newsletter*.

Various Frequencies Were Compared With Distances Between the Device and Objects

The User Remembers Just One Pitch and Its Corresponding Distance; A Convenient Distance Would Be Eighteen Inches

is higher. The pitch of the note heard is proportional to the distance one is from an object. The lower the pitch, the closer the object, and vice versa. On short range, the aid can effectively detect an object which has a diameter of a parking meter 7 feet away. For more reflective objects, a range of 9 feet is occasionally possible. With the aid of a computer, the various frequencies (pitches of notes) were compared with the relative distances an object is from the device. It is interesting to note that the difference in pitch is two octaves when an object is moved from one foot to two feet away. However, when the object is moved from 6 feet to 7 feet away, the change in pitch heard is only one note. It is therefore obvious that small objects and details of larger objects are better detected when they are close, since the range of notes is greater. This also has important implications in the method in which curbs (which are less than six inches) are detected as well as how close they must be in order to be detected. The same applies for any object or hazardous situation such as stairs. Between six and seven feet, there is very little pitch difference. Now it will not be necessary for the user to remember all the pitches of notes which correspond with the distances he may be from an object. He needs only to remember one pitch and its corresponding distance, and from that calibrated distance determine if an object is closer or further away. A convenient calibrated distance would be approximately 18 inches. This distance corresponds to a certain note (pitch) and will be called X. If the note Y is heard and it is lower than X, the user knows that the object is less than 18 inches from him and can be touched. If the note Z is heard and is higher in pitch than note X, the object is more than 18 inches from him and cannot be touched. In other words, he need remember only one pitch and its corresponding distance, and use that to compare distances of objects. The pitch received at 18 inches can be readily found if the device is held vertically down one's side along the body. The distance then between the end of the device and the ground is approximately 18 inches. With this readily available method of calibrating a certain distance, the user can always use it in any situation and on any terrain.

What is heard with the aid is more than a selection of notes of various pitches. The quality of notes and the combinations of notes compose a complex language which is foreign to all. But as in studying a language, one has to begin with simple and gross examples and gradually build on this foundation. And he must have a system to his study.

The Technique for Holding and Using the Device

☐ In the beginning, the technique for holding and using the device was not unlike that for the long cane; however, realizing that the effective beam is much longer and wider than the shaft of the cane, adjustments were soon made. The device is held at midline with the upper arm nearly vertical and against the body, the forearm angled across and down so as to position the hand near the belt. The wrist is deviated ulnarly so that the aid is at an angle to the ground approximating 30 degrees from horizontal. In this position, while on level terrain, the device is approximately 40 inches from the ground, and the end of the 7 foot length of beam on a point 6 feet in front of the toes. To clear the area while moving, flexion and extension of the wrist is

With a Few Hours of Practice, It Is Easy to Detect Any Object in the Line of Travel

needed as with the cane. However, the degree of movement is smaller for two reasons. First, the length of beam is much longer and secondly, unlike the cane, the beam has an effective 10 degree spread. This means that at 7 feet the beam is 14.7 inches wide. (At 20 feet it is 42 inches wide.) To be more exact, it must be noted that the beam is actually circular and has a 14.7 inch diameter at 7 feet. Consequently, flexing and extending the wrist is limited to a range of 6 degrees from midline or 12 degrees total. This is quite small and very difficult to maintain.

In teaching terms, it is easier to say that the user would alternately point to a spot on a line just inside either foot. The term "keeping in step" will not apply here because of the length of beam. However, it is easier to maintain the necessary scanning rhythm if one stays in step. Other methods of scanning can be developed for certain situations. But on the whole this scanning method similar to the touch technique is adequate for most situations.

What can the blind traveler easily detect with the device? With only a few hours of practice, it is quite easy to detect any object in the line of travel. After getting used to the sounds of the device and the feeling of walking blindfolded without the physical contact which one gets with the cane, it is possible to walk comfortably in semi-controlled areas to a given objective. However, orientation was maintained by using sound clues other than those of the aid as well as by using tactual clues from terrain and by using air currents and odors. It was fairly easy to locate intersecting corridors, opened doors, chairs, tables, bicycles, wagons, poles, etc. It was more difficult to detect the difference between wood and cement floors except by walking on them. Objects such as cars, hedges, trees, and pedestrians and some irregularities in sidewalks would also be detected. In general, it can be said that using the device properly, one will not make unnecessary physical contact with an object whether it be small or large. Although it was not possible to determine what the object was at this time, it was possible to determine that something was in or near the line of travel.

Difficult Situations Encountered with the Device

☐ What are the difficult situations encountered with the device? The most important shortcoming is the difficulty in detecting drop-offs including curbs and stairways. If one is familiar with the environment he can anticipate curbs and stairways and prepare himself by trailing a wall or grassline. However, in an unfamiliar area it would be most difficult. Using other clues, such as the slope of a sidewalk before a curb or the sound of traffic, the detection of curbs is a little easier. However, this implies that the user has a firm foundation in basic concepts and techniques which are learned during many weeks of cane travel.

With Auditory Distractions, It May Be Difficult to Concentrate on the Important Sounds of the Device

Another difficulty is concentration on two different sounds. As an example, with the cane one can follow a grassline tactually and listen to sounds of traffic to maintain orientation. With the aid, however, one follows the grassline using sounds from the device. He then has two different sounds to follow and use. When this is combined with the distractions of loud whistles, children playing and yelling, trucks turning, and construction workers, it is very difficult to concentrate on the important sounds of the device.

For those who have used a cane, there is a very insecure feeling when using the aid. Some describe it as a sense of walking in space. However, this lessens to some degree as one uses the aid more. Looking ahead, if a blind person needs assistance to cross a busy street, it seems that he would more readily receive help if he has a recognizable white cane than if he had the device which resembles a flashlight.

Many of the problems encountered with the device will also be encountered with the cane. These would include gas stations, driveways, and curbs. However, if the blind traveler is proficient in his use of basic concepts and techniques, such as traffic interpretation, these problems will be minimized.

Another difficult area is maintaining a straight line of travel. This is very difficult in wide areas unless the blind traveler has a consistent rhythm and technique and is able to walk parallel to traffic or is walking toward a source of a sound. Once again these are basic techniques which must be developed.

In general, a person who is to use the aid in mobility must have a firm foundation in basic concepts and techniques. Presently these are best taught before and during the use of the cane. They include use of the sighted guide, direction taking, turns, traffic interpretation, and awareness and use of all non-visual clues. A minimum of five weeks of training in basic techniques is suggested.

How Far Should One Go in Teaching a Blind Person to Use the Device

☐ An important question is "How far should one go in teaching a blind person to use the device?" To teach him to be an effective, efficient, and safe traveler only would be wasting the extra advantage of the device, i.e., to explore areas and objects which are out of his reach. But how much instruction in "cultural geography" is necessary before he can explore areas by himself? It is impossible to have him experience all objects and situations he might encounter. Is it possible to classify all objects and situations and then select examples of each? How much practice in determining the width and height of objects is needed?

As an orientation and mobility instructor, this writer sees many problems in just this area. To teach "cultural geography" is still another area with many problems. But included in those problems in mobility training are:

1. Development of aptitude tests to select candidates for training.
2. Development of achievement tests to compare individuals with those who use other modes of travel.
3. Development of auditory tests in order to screen candidates.
4. Development and/or refinement of a device so that the instructor can "tune in" on exact information received by the blind person when using the aid.
5. Development of step-by-step lesson plans in basic techniques as well as techniques used with the aid.
6. Taping of sounds which one would hear with the aid.
7. Development of circumstances so that one can develop the techniques for exploring his environment.

In conclusion, it was the purpose of this paper to present some of the prob-

(Continued on page 154)

Press Relations:
One Tool in A Community Relations Program

PATRICIA SCHERF SMITH

Mrs. Smith, managing editor of The New Outlook, *spent a number of years doing public and press relations for various medical organizations*

Press relations is just one tool in an organization's overall public or community relations program. A press campaign, no matter how expertly conceived and executed, is only a part of what it takes to create the understanding and good will that public relations connotes.

There is a popular idea that making page one or even page thirty-one is practicing public relations. This is not completely true. Press publicity, by itself, should not be considered the whole of public relations. A press campaign is simply a tool to be used to further public relations goals; it is not an end in itself.

What then is the aim of good press relations? (Perhaps the term "media relations" should be used, for there are several outlets besides newspapers —radio, television, popular magazines, and professional journals.)

The aim is to inform and educate the public, to tell a story, to create an atmosphere of good will and interest for the organization serving the blind. But what story to tell? Just getting the organization's name mentioned is not enough; the public must be told about the organization and why it is important to each individual newspaper reader or radio listener or television viewer. Before going into specific story ideas, it may be worthwhile to discuss how one of the media, a newspaper for instance, determines that a certain story is newsworthy.

The Criteria Used in Evaluating a Story

☐ There are many definitions of news, including one that states that news is an account of an event or point of view that a newspaper prints in the belief that it will be of interest to its readers. This is somewhat vague, and perhaps it would be best to investigate news through the criteria that newsmen use in evaluating a story. These are timeliness, proximity, prominence, consequence, and human interest.

Timeliness is probably the most important, especially if a story is to run on page one. A newspaper wants today's news today, not next week. As the old saying goes, today's news is tomorrow's fish wrappings.

Concerning proximity, an event occurring within the territory of a newspaper's circulation is usually of greater interest than a similar event occurring elsewhere. Thus, a Chicago paper runs Chicago stories, not Detroit stories, unless the facts are offbeat and fall into the area of human interest.

Prominence refers to public interest in an individual. A story about a widely known person—President Johnson or Mary Martin—is of interest to everyone,

This is another in the *Outlook's* series on various aspects of public relations. It is an adaptation of a speech the author originally gave to a group of hospital auxiliary publicity chairmen.

and will frequently take precedence over a local story. And, of course, stories about prominent individuals in a given community take precedence over less prominent people.

Consequences of certain events are also taken into consideration in selecting a story. Some stories are run, regardless of their timeliness, proximity, or prominence of the individuals who figure in them. In fact, they are run even if they are somewhat technical and lack appeal for the average reader. Complicated stories about tax changes are a good example, as are stories about congressional activities. Some stories about organizations for the blind might fall into this category. In fact, one of the reasons for stories appearing in the paper frequently are the consequences for the reader. What will be the meaning to the community of a new program in mobility training?

And the final criterion is human interest. Under this fall all the funny little stories, the out-of-the-ordinary ones, the behind-the-scenes facts. These are usually given feature treatment. An organization for the blind is full of human interest material.

A News Story—The Five Criteria Plus the Five W's

Thus, a news story is an account of an event that will interest a reader because of its timeliness, its proximity, its consequences, the importance of the persons involved, or its simple human interest. The well-known five W's of the journalist—Who, What, When, Where, and Why—are another way of describing these criteria.

Before discussing the actual writing of a news release, let us think about the people who will be considering it for publication. Ideas of newspaper men picked up from the movies or stage should be revised.

The People Who Publish Stories

☐ Reporters and editors are like everyone else—people doing their jobs. A few old timers might still be termed "colorful," but on the whole they are respectable, polite, hardworking people. Sometimes they may appear brusk and sharp, but that is usually because they are working against time.

How One Gets to Know These People

How does one get to know these people? Often, the direct approach is effective. Telephoning a newspaper or broadcasting station to ask if a certain story would be of interest is one such approach. Going in for a visit (with an appointment at the convenience of the host) is another.

The most fruitful and ultimately most valuable contact is the individual directly concerned with covering and writing the news—the reporter. In a large city, knowing reporters who cover public service and educational activities is a must. In smaller cities, editors are the people to know. Regardless of the situation, maintain good relations with the right persons, and be sure to know their names.

A Few Rules for Good Personal Press Relations

There are a few rules for good personal press relations:

1. Know the deadlines of the media, and do not visit or phone at critical times, and, of course, get material in early enough to meet those deadlines.

2. Know the names of the news people, and spell and pronounce them correctly. Names are important because they belong to the individual and no one else. News people spend half their time learning to spell names correctly, and are particularly sensitive about mistakes in names. Do them the courtesy of knowing their names; it is their duty to know yours.

3. Do not use the backdoor approach to getting a story in to a paper or on a broadcast. It is the news department's function to get the news—not the advertising or business department's. Newsmen dislike feeling pressure from an ad department or from a publisher. Most of them are only too happy to receive story ideas. (It has been estimated that 40 percent of all the material appearing in newspapers comes from public relations sources.)

Writing the Story or News Release

☐ Let us now consider the writing of a story or news release. In some places written stories might not be necessary—particularly in smaller towns where stories can be told to a reporter directly or by the telephone. In larger places, however, releases can be more useful. However, to be useful, they must be good releases. There are rules concerning them that must be followed: use 8½ by 11 inch paper; send out typewritten or mimeographed sheets (not carbon copies); typewrite and double space all material; use one side of the paper; state a release date (either "Immediately" or for publication during the morning or afternoon of a specific date); indicate, at the top of each page, the name of the organization which is the source of the release, and a person who may be called for additional information and his or her telephone number. These rules sound very simple, but following them or forgetting them may often be the difference between having a story published or thrown in a wastebasket. If the copy is hard to read, people just won't bother with it.

What Should be Remembered in the Lead

As a news release is being written, it is good to remember the five W's—Who, What, Where, When, and Why. These questions should be answered in the lead of the story, usually in its first and second paragraphs. ("The XYZ Agency is planning a tour of its headquarters on June 4th to acquaint the public with its new programs for teaching braille to older citizens who are blind.") It is also good to remember that most newspaper stories are written in the inverted pyramid style, starting with the most important facts and ending with the least important. This is done so that an editor can cut the end of the story without having to rewrite it. (While writing for newspapers, bear in mind the particular style of the publication or publications which will be receiving the release. Study their style and compose the release accordingly. When preparing a news release for radio or television, tailor it to the needs of the newscaster. Releases should be shorter and should carry only the main facts. Sentences should be shorter, with the writing style more conversational, the words chosen carefully to weed out tongue-twisting language. The heart of the story should not be in the lead, but in the middle of the piece. Opening sentences must point to the story's core, so that people who are only half listening will still catch the story.)

Telephone and tell them it is being sent

Once a release is ready to go, it is a good practice to telephone a newspaper or broadcasting station and tell them it is being sent. One word of warning about telephoning, however, must be said. *Advertising Age*, a national magazine concerned primarily with advertising, once did a study of New York City public relations men. The magazine surveyed New York newsmen about their reactions to public relations people, and one of the newsmen's biggest complaints concerned telephone calls. As one journalist said, "This public relations guy calls to tell me he's going to send me a release; then he calls to say it's on its way, and finally he calls to ask if I received it." Use the telephone with discretion. Call only when it is necessary.

See That Everyone Gets the Same Release Time and Same Story

There are other points to be remembered. When sending out releases, see that all newspapers or stations get them with the same release time and the same story. Exclusives, generally, are not recommended. If, however, a newsman has dug up a story on his own and asks for additional information, his work must be protected by silence. Telling his competition about the story is something less than good manners.

If someone asks for additional information, the "off the record" technique should be avoided. If something is "off the record," do not tell anyone about it.

Newsmen seeking information should be directed to one person in an agency who is prepared to help them. If this person cannot be reached, a second such person should be available.

Hedging About Not Having Information Should be Avoided

When newsmen call and the information they want is not at hand, tell them so, ask how soon they need it, get the information and then call them back. If the information is still unavailable, call the newsman anyway. Hedging about not having information should be avoided; a reporter's time is valuable.

Do not get involved in editorial matters. Presumably, a reporter knows how to write his story. This is his job.

Do not ask to see a story before it's printed or broadcast. In the first place, there is rarely time for this; in the second, the request is a slur on the reporter's ability. Occassionally a reporter may ask that a story be reviewed, particularly if it is a technical one; if he does, check the story for facts and accuracy—not for grammar, punctuation, or style.

Reactions to Inaccuracies Should be Considered

At times, an inaccuracy may appear in a story. Before complaining about one of these, it is best to consider its gravity. If the inaccuracy is serious, bring it to attention of the writer himself (not his superior); in most cases, a newspaper or station will readily make a correction. If the inaccuracy is minor, remember that a newspaper is published daily, often with six or eight editions, and that much news is transmitted over the airways. It's remarkable how few really serious errors occur.

Don't ask when a story is going to run. The paper's editor or station's program director is the judge of this, and often, even he does not know until a very late stage.

What About Photographs?

☐ Now what about photographs? A photograph is worth a thousand words, but only if it tells a story. The key word in good, sharp pictures is action. A group of four people staring into the camera lacks action, to say the least. If group pictures are used, keep the number of people in each to four or less, and avoid trite poses—handshaking and ribbon-cutting are two of the most common. Be wary, however, of pictures without any people. People add a necessary element to the majority of photographs.

In the case of elections and appointments, send out "head-shoulders" photos of the subjects. Be sure the photos are recent and not too heavily retouched.

Basic Principles to Follow With Photographs

As with releases, there are basic mechanical principles to follow with photographs:

1. Use a good photographer.

2. Photographs should be either 5 by 7 inches or 8 by 10 inches (preferably the latter).

3. Newspapers and magazines use photos printed on glossy paper; television requires a dull paper.

4. Television photos should be horizontal, consistent with the proportions of the television screen.

5. All photographs should be properly identified, with a brief caption explaining activity in the photo and identifying people in it from left to right.

Activities Which Profit from a Press Relations Campaign

☐ What are some activities that might profit from a well conducted press relations campaign? Some which come immediately to mind are:

1. election or installation of officers;
2. an event associated with a special week or day, such as "Hire the Handicapped Week;"
3. tours of the agency, either for persons associated with the agency or for the public;
4. fund raising activities, wherein news stories can explain how the fund will help the community's citizens. Stories on fund raising are innumerable, from announcement of the beginning to the final presentation of the equipment or whatever to the agency. Be sure to remember the follow-up story on how the money was used;
5. staff members attending conventions or special workshops;
6. the presentation or receiving of an award;
7. having an out-of-town speaker appear at a function of the agency. Newspapers appreciate receiving a copy of the speaker's text in advance, marked for an appropriate publication time after the speech has been given.

In summary, try to maintain good contacts with newspapers, radio and television stations. Be accurate, brief, prompt, and honest in all dealings with newsmen. Above all, do have a story to tell. One or two good stories a year are worth a hundred poor ones that are quickly forgotten.

Research Skills Institute

The Department of Special Education, Teachers College, Columbia University, has been awarded a grant by the U.S. Office of Education to conduct a special study institute entitled "Enhancing the Research Skills of Teacher Educators in Special Education."

This institute, June 5 to June 23, will be designed to add to the skills of selected special education faculty members in creating, developing, and supervising student and community research. It will be open to special education faculty members who will have research responsibilities in September, 1967. Applicants should write to Dr. Herbert Rusalem, Department of Special Education, Teachers College, Columbia University, New York, N.Y. 10027.

Exploring a More Efficient Method of Teaching Braille

CLAUDELL S. STOCKER
MARY J. WALTON

Mrs. Stocker is communications instructor at the Rehabilitation Center for the Blind, Topeka, Kansas. Miss Walton has served as auxiliary home teacher in Kansas and is a certified braille transcribist

Few adventitiously blinded adults learn to read and write braille fluently. For years, home teachers, rehabilitation center instructors, and others have asked why this is so. Nearly all have eventually reached the same conclusion: blinded adults seldom have the time, patience, or perserverance to struggle through the long, tedious learning process set forth in most books.

A few blind persons, with exceptional aptitude and motivation, have tackled the job single-handedly, mastering braille to the point of receiving from it genuine pleasure in reading, a creative outlet in writing, and a practical method of communication with themselves, with no help other than just a visit or two from the home teacher who left the necessary books and other materials. Others, highly motivated but perhaps less aggressive, require the more readily available tutelage of some blind person in their community or of the braille instructor in a rehabilitation center to attain the same degree of proficiency.

Reasons for Failure to Learn Braille

☐ But even under the most favorable conditions, the learning process has been so long and slow that only the brightest and most strongly motivated ever saw it through. Only a few exceptional ones were able to master all the contractions of Grade 2 braille within the period of four months that the average trainee spends in a rehabilitation center. Even for those, it took a great deal of time and practice to gain enough speed and skill to make braille anything but a tiresome chore.

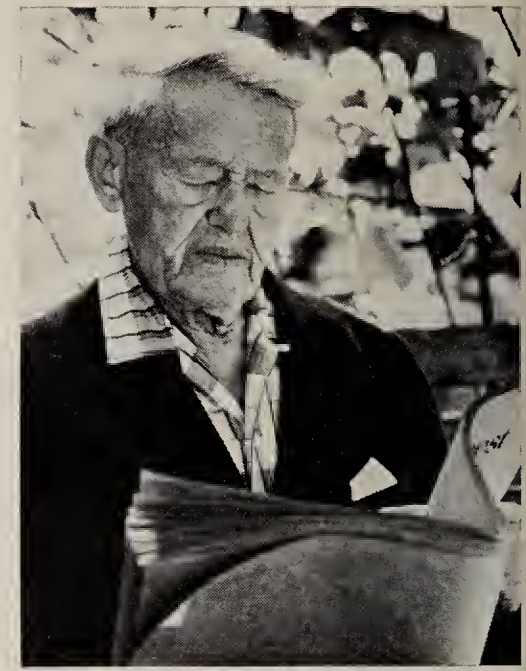
Teachers Conclude Most Cannot Go Beyond Grade 1½

Teachers, watching their students fall by the wayside at various stages after completing the alphabet, continued to ask themselves why. Many who had started out well were leaving the center with barely enough braille to enable them to punch out an address, phone number, or grocery list. The villain still seemed to be the time element—or was it? Many students, highly motivated, were able to work their way quickly through the letters. This led some teachers to the conclusion that the majority of blinded adults were simply incapable of going beyond Grade 1½.

Yet the fact had to be faced that this watered-down carry-over from that mistrustful period of the early '20's and early '30's was dying a quiet natural death, and that such books and magazines as remained available in that form were being rapidly discarded or converted into Grade 2. What, then, was the answer? To remain content with a figure of 75 percent whose only reading skill consisted of the ability to turn on a switch, set a needle on a record, or thread a tape? Or seek better, faster, more efficient methods of teaching braille reading and writing skills?

Much Unlearning Is Necessary In Grade 1½ Braille

To those in search of a better teaching technique, one fact began to emerge: a great deal of unlearning was involved in the learning process after the comple-



tion of Grade 1 braille. Let me illustrate a sentence we copied whenever we gave public braille demonstrations. The sentence which we would first write in Grade 1, then in Grade 1½, and finally in Grade 2 reads: "Father and Mother have very little knowledge of braille." Even after Grade 1½ was officially written off and new textbooks were compiled incorporating all the contractions in logical sequence, there was still that first stage in which the student learned to read words, sentences, and little stories written out in full spelling.

John Dollard, the famous learning theorist, has said that one never really forgets anything he has ever learned. One returns to his childhood home after several years absence to find the familiar furnishings all rearranged. On the conscious level one is able to accept this new order quickly, but the picture of the house as it used to be remains in one's mind so that he continues to look for objects in their old places. So it is with any learning process.

If a student learns to write words in full spelling and is later introduced to them in contracted form, he must not only learn the new contractions but unlearn the uncontracted forms with which he has become familiar. If Grade 1½ is still included in the teaching process, this may mean that he sees some words written in three ways. When one understands the phenomenon of the indelible imprint stamped on the mind by the first impression it received, it is not hard to imagine the confusion this three-layer learning process creates. Is it any wonder that blinded adults tend to read slowly and make more errors in writing than those who have grown up with braille?

Kauffman Theory Bypasses Grade 1

☐ Charles Kauffman, a North Dakota home teacher, theorized that braille can be taught more quickly and effectively by bypassing the Grade 1 stage and teaching the contractions right along with the alphabet. Thus in the first of twenty lessons, the student learns not only the letters "a, b, c, d," but the contractions "but," "can," "about," "according," and "could." With the second lesson, which introduces the letters "e, g, k, l," and the contraction "every," "go," "knowledge," "like," "also," "blind," "declare," "declaring," "little," and the period, the student is given short, simple sentences to read. The adult blind student, it is assumed, does not need to learn the spelling of words as does the small beginner, but rather to acquire a new means of written communication; therefore, it is not necessary to teach him the uncontracted forms of words, but only that form in which those words will always appear on the braille page. Normal-sized dots are used from the beginning, and gone are the large inkprint raised letters so long cherished as an aid to introducing the student to the braille symbols. The student who successfully completes the twenty lessons has mastered elements of the braille system.

Kansas Center Method Still under Refinement

☐ The braille teaching method employed at the Kansas Rehabilitation Center for the Adult Blind for almost two years is based on Mr. Kauffman's work. Our techniques are still undergoing a constant process of refinement;[1] but results thus far convince us that we have taken a big step in the right direction. To replace the old raised letters we have employed disc recordings (to be played on a talking book machine) of the lesson introductions for independent study. Some experimentation has been tried in the field of using this method and the few samples thus far are proving more effective than the old way. We find that most students are not only completing the course within four months, but are learning to read faster and to write better braille.

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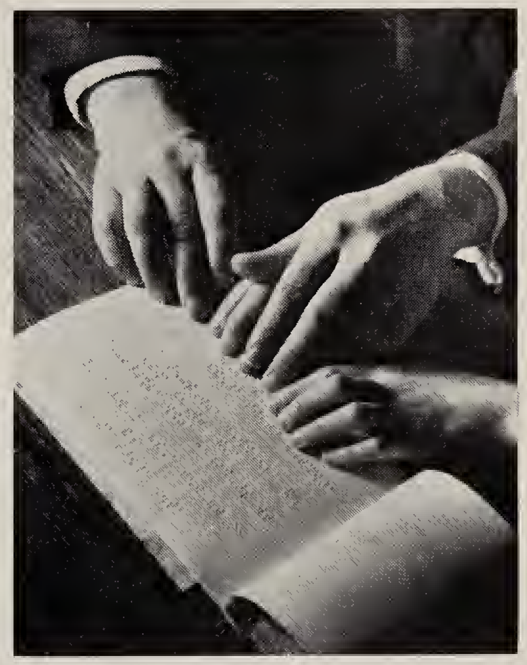
[1] The work entered a second phase in late January 1967. The technique is being used with more clients, and if it proves successful, the authors will attempt to publish the teaching manuals and textbooks.

Contraction and Punctuation are Learned More Easily in An Informal Manner

We have found, too, that the rules which govern the use of contractions and punctuation marks are learned more easily and thoroughly when presented in an informal, positive manner as the symbols they deal with are introduced, rather than as a set of rules to be memorized and linked up laboriously in the back of a book when one is in doubt. Thus, in the first lesson, the student is told that single-letter signs must always stand alone, and can only represent the words for which they stand, and that they cannot be used as part of a word. When the first short-form words are presented, he learns that, while they can be used as part of a longer word, they must not be used when they would cause confusion for the reader or result in misspelling.

Student is Given Two Weeks of Readiness Exercises

Before beginning the study of braille, the student is given approximately two weeks for preparation. This is in the form of braille readiness exercises, to acquaint him with some of the new techniques he must acquire in braille reading, such as the kinesthetic memory of moving the hand from left to right and staying on the line. This eliminates the initial struggle one encounters in trying to use two senses at once: the kinesthetic and the tactile senses necessary for being a good braille reader. Results, as shown in a study of the clients in our braille program during the nineteen months following the conception of the new method and the comparable period of time preceding its adoption have proven, beyond our highest expectation, the superior effectiveness of this new teaching method.



From July 8, 1963, to February 22, 1965, seventy-five clients went through the Center's training program. Of these, forty-two had a visual acuity too low to permit any form of reading by sight. Of these forty-two, nine had already learned Grade 2 braille before coming to the center. Of the remaining thirty-three, eleven were unable to progress beyond Grade 1 because of such additional handicaps as mental retardation, emotional disturbance, brain injury, and functional illiteracy. Sixteen had completed at least half of the Grade 2 contractions at the end of their four months and were planning to continue learning at home. Only six had completed Grade 2 at the end of their stay at the center.

Clients' Successes With New Technique

☐ During the period since adoption of the new method—February 22, 1965, to September 6, 1966—the Center program served seventy-nine clients. Of these, fifty were of sufficiently low visual acuity to be included in the braille program. Of these, eighteen were already fluent users of Grade 2 braille. Of the remaining thirty-two, twelve were unable to progress because of mental retardation, brain damage, functional illiteracy, or extremely low motivation. Twenty completed the course within four months or less.

Results of the New Technique

Looking at these two sets of figures in terms of percentage, the result is rather startling. In a group of almost equal size and over a comparable period of time, only six of thirty-three, or less than 20 percent, were able to complete Grade 2 braille within four months using the old methods. With the new method, twenty of thirty-two, or 66.5 percent, completed the course successfully in four months or less. Is it possible that all or most of the sixteen in the first group who were unable to go all the way might have completed the course more quickly had we then had our present teaching tools?

Braille Represents Final Capitulation to Blindness

It goes without saying that certain variables play a large part in determining the success of any teaching method. The student is still an individual with his own needs, and his own problems. Every blinded adult has a conscious, or more often, unconscious resistance to braille; the learning of braille represents final capitulation to the dreaded reality that, for them, there will be no more quick scanning of the printed page. Some are able to face and accept this reality more readily than others. Some learn rapidly; others must plod along at a slower pace. Some must go through a longer period of preparation than is required for others. The attitude of the teacher, too, plays its part in the motivation of the student. The teacher should come to this task with the positive conviction that braille is a blessed convenience, not a necessary evil; a potential source of real pleasure and an effective means of communication, not an awkward unwieldy tool.

Conclusion

☐ It is our conviction that immediately teaching Grade 2 braille is one of the best aids to developing a healthier attitude toward braille on the part of both teacher and student, in that it enables them to function in a relationship, not so much of teacher and beginner pupil, as of two adults working together in this phase of a rehabilitation program.

The Ultra Sonic Aid—*Continued from page 145*

lems encountered in using the Ultra Sonic Aid as a mobility tool. Also some areas of exploration are suggested.

It is this writer's opinion that the aid has possibilities as a supplement to a blind person's travel. However, although it does not mask out all sounds, the sounds that the user does receive from the device can be confused, complex, and distorted, and many changes are so slight as to be unnoticeable. This fine discrimination of sounds that is sometimes necessary suggests that perhaps congenitally blind persons may have more success with the aid, as they have learned early to detect and use sounds to good advantage. Yet there is the risk that this device may be just another wedge to divorce the blind person from concrete learning experiences. Besides "verbalism," many congenitally blind persons may exhibit "soundism."

Many Blind Persons May Gain More Knowledge of the Environment After Good Instruction

Although the Ultra Sonic Aid will not replace the cane or dog in the near or distant future, many blind persons may gain more knowledge of the environment after good instruction. It should not be dismissed as a passing fad or novelty, but be given serious thought as another aid to widen the range of experience for a select group of blind individuals.

The Expression of Emotion by the Blind

This is the first half of a two-part article on the expression of emotion. The second half will appear in next month's issue.

LESLIE L. CLARK, M.A.

Mr. Clark is director of the International Research Information Service at the American Foundation for the Blind

The following two papers are offered to the readers of the *New Outlook* as representative of a wide variety of papers on the expression of emotion. We feel that they may be of interest for two reasons. The first is that there is at least one major theoretical problem involved, that of the origin of expression and of facial expression in human beings, whether sighted or blind. The second reason is that our understanding of the origin of expression of emotion may well be related to behavior patterns among the blind, and among blind children particularly, which we may wish to study and perhaps to change.

In a paper published not long ago in *Scientific American* (April 1965), R. J. Andrew described the observations of Charles Darwin who, in *The Expression of the Emotions in Man and Animals,* outlined in considerable detail an evolutionary theory of facial expressions. Darwin claimed that the origin of facial expression could be traced back to primitive activities (such as drawing back the lips preparatory to biting). These activities evolved into a sign of the original act (simply drawing back the lips) to convey the content of an act. And facial expressions, evolved in this way (even though they might change their relationship to a particular emotional state and the facial musculature might change in the course of evolution), had high enough survival value that they were passed along the evolutionary ladder, eventually to man.

Andrew makes of this a rather general argument, namely that ". . . the raised eyebrow, frown, smile, laugh and even the ability to speak may all have evolved from ancestral reflex actions that were gradually transformed into means of communication" (p.88).

In one of the papers presented here, Dr. Freedman attacks the question of innate versus acquired behavior directly in his quest for the basis of smiling in infants. His record, which may be read like a detective story, can also be taken as a progress report of one researcher's attempt to formulate an hypothesis explaining events among which he sees similarities while others see only differences. Some readers may find the ending unsatisfying because, unlike the usual detective story, the reader is asked to engage himself in the search, and the culprit is hard to identify. To the nonspecialist, however, this paper has the enormous advantage of showing plainly the patchwork and seams of science, with the result that he may gain an understanding of scientific thinking during the time he is being introduced to a problem in theory.

The other paper presented here, that by Dumas, deals directly with the problem of imitation or mimicry. With a typically French passion for precision, he presents us with a novel idea: that one can teach a congenitally blind person how to express joy, but one cannot teach him how to express fear or anger. This paper is akin to what the Germans call a "think-piece," for our poise is upset by the notion that we cannot really mimic anger or fear if we cannot see. The reasons may amuse you.

Finally, we should point out that the ability to imitate gestures can be tested. Our colleague, Dr. Arthur Parmalee, Jr., has done us all the service of translating from the French a book by J. Berges and Irene Lezine entitled *The Imitation of Gestures: A technique for studying the body schema and praxis of children three to six years of age.* The tests are nonverbal and validated against a population of 500 normal and 100 prematurely born children. Those interested in pursuing the topic treated in the following papers might well wish to look at Dr. Parmalee's translation.

We hope to raise some questions in the reader's mind when he follows the two trains of thought suggested here. Can we measure mimicry? Is it innate or acquired? What is the social and symbolical content of facial gestures? Is there a relationship between these expressions of emotions and a presumably conditioned response expressed in "blindisms"? In any case, we invite comments and discussion.

Smiling in Blind Infants and the Issue of Innate Versus Acquired

D. G. Freedman, *Committee on Human Development,*
University of Chicago

Darwin (1872) wrote that many of the expressions of the congenitally blind, since they could not be learned by visual imitation, must be innate. He quoted the case of congenitally deaf-blind Laura Bridgeman, reported in 1851 by Lieber, to illustrate his point, and among the expressions he listed as innate were smiling and laughing. Darwin also noted that his own children first smiled at about forty-five days of age, and he reasoned that since this was too early for imitation to have played a role it was also evidence that smiling in man is innate. As further evidence, he noted its universal presence in man.

As for the survival value of the baby's smile, Darwin presented what would today be an obvious hypothesis concerning the joy it creates within the adult caretaker. (See Goldstein, 1957 for citations and discussion of function; see also Ambrose, 1960.) This paper, then, is primarily concerned with the "innateness" of the baby's smile, and with the clarification of this problem provided by studies of blind infants.

Observations and Studies in The Development of Smiling

☐ In the sections which follow, observations and studies will be reported in which the age of the infant appears to play an important role in the development of smiling. Aside from hereditary causes for individual differences (Freedman, 1965), a major difficulty of focusing on age is the fact that different environments can slow or speed development of smiling, usually depending on

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Dr. Freedman's article was first printed in the *Journal of Child Psychology and Psychiatry,* published by Pergamon Press, in 1964.

the amount of social stimulation (Kaila, 1932; Spitz and Wolf, 1946; Ahrens, 1954; Brackbill, 1958; Ambrose, 1961; Gewirtz, 1963; Wolff, 1963). Also, the reported first age of smiling may often be an artifact dependent on the amount of time the observer spends with the infant; the more time he spends, the greater are his chances for observing a smile. The stress throughout the paper will therefore be on sequence, rather than age, in developmental events.

With regard to imitation, observers agree that deferred imitation, i.e., imitation removed in time from the act imitated, does not normally occur until after the first year (Valentine, 1930; Piaget, 1950; Freedman and Keller, 1964). Thus smiling to a non-smiling stimulus in the first months of life cannot reasonably be called imitative, even in seeing children.

Another general point is that smiles are increasingly reserved for familiar persons, beginning at about five months of age in family-reared infants (Freedman, 1961; Freedman, 1963), and at about eight months of age in institution-reared infants (Spitz, 1950; Malliardi *et al.*, 1961; Ambrose, 1961). Soon afterwards infants begin to react with overt fear when confronted with a stranger (Schaffer, 1963; Tennes, 1963), and this rising fear of strangers is a major factor in the waning of smiling in many of the investigations to be reported.

One Often Sees Smiling After Feeding as the Infant is Falling Off to Sleep

In the first weeks of life in full-term infants, and over a longer period in prematures, one often sees smiling after a feed as the infant is falling off to sleep. All modern observers agree that these smiles are not due to escaping gas, as the old-wives' tale would have it, and no eliciting stimulus has been discovered (Kaila, 1932; Spitz and Wolf, 1946; Koehler, 1954; Wolff, 1963; Freedman, 1963). Non-elicited smiling thus falls into the general category which Lorenz (1937) calls "vacuum activities," i.e., behavior which appears in the absence of normal eliciting stimuli, usually in an early stage of development. Wolff (1963) has a similar interpretation:

"Particularly in prematures, but also in full-term infants, the smile may often be preceded by a twitching myclonus at the corners of the mouth which has at least a superficial resemblance to an electro-physiological event and gives some further support to the notion that smiling in the early days after birth may be a spontaneous discharge. A final piece of indirect evidence for this supposition was the observation that, like erections and spontaneous startles, smiling tends to occur with a high frequency during drowsiness when the eyes close."

Nonelicited smiles tend no longer to appear by the end of the first month, but instead, touching various parts of the face, especially the lips (Smets, 1962), and a variety of auditory stimuli, may bring about smiling. Hetzer and Tudor-Hart (reported in Buhler, 1933) tested 126 infants, ranging from one day to five months of age, with various acoustical stimuli including the human voice. While general reactions to the voice were only moderate, the reaction of smiling was almost exclusively to voice. Various modifications of the human voice at two months all resulted in smiling. There was no difference in smiling to mother's or other people's voices, or to nuances of vocal expression, within the first five months.

Smiling to Acoustical Stimuli in a Detailed Study of Eight Precocious and Highly Stimulated Infants

Wolff (1963) found that smiling to acoustical stimuli occurred in the third week of life in a detailed study of eight precocious and highly stimulated infants. Such smiling occurred after nonelicited smiling had dropped out, and before smiling to visual stimuli (see below) had developed. While smiling might be elicited by a bell, whistle or rattle at this stage, a high-pitched human voice was easily the most effective stimulus used. Wolf, in the course of her work with Spitz (1946), also made the observation that a high-pitched voice more readily elicited smiling than a low-pitched voice (personal communication).

Recently, L'Allier (1961) studied 120 institutionalized infants ranging in age from one to thirty-three weeks; fifteen infants were tested in each of eight consecutive four-week periods. A series of sixteen stimuli was presented to each infant and the frequency of smiling noted. Maximal smiling to all stimuli occurred between three and four months, and when all ages were considered together, various musical instruments were the poorest elicitors of smiles. The best elicitors were as follows:

	Frequency		*Frequency*
Voice (*E* unseen)	19	Picked-up and caressed	25
Voice and caress (*E* unseen)	31	Voice and face (moving)	80
Voice and picked-up (*E*'s face in profile)	35	Face	75
Voice and caress and picked-up	39	Voice and face and caress	65
		Voice and face and caress and picked-up	46

A Study of Eighty-Eight Infants Found "Voice and Face" the Best Elicitor of Smiling

In a study of eighty-eight family-reared infants, Laroche and Tcheng (1963) also found "voice and face" to be the best elicitor of smiling, over the first half year. In this study "voice" alone was superior to a "static face" but a "moving face" or "smiling face" elicited about as many smiles as did "voice" alone. In this population, maximum smiling to all stimuli occurred between four and six months.

Clearly, voice is a highly efficient stimulus to smiling. In L'Allier's study, however, the visualized moving face was the most efficient stimulus, and this is in accord with the bulk of current data.

The Visualized Moving Face—Interest and Work in This Area

☐ By far the greatest interest and greatest amount of work has been in this area. Starting with the highly original work of Kaila (1932), there have been several studies of infant smiling to various forms of visual stimulation (Spitz and Wolf, 1946; Ahrens, 1954; Wilson, 1960). Beginning at the end of the first month and into the second and third months, infants begin to stare into the observer's eyes, and for the first time eye-to-eye contact is obtained. Soon afterwards smiling occurs as the infant stares in this way, and such smiling is usually subjectively felt by the observer as the first true social smile probably because of the eye-to-eye contact (Wolff, 1963).

Kaila (1932), working in Charlotte Buhler's nursery in Vienna, became interested in the infant's "fascinated" staring into the adult face just preceding the smile, and set out to find what elements of the face the infant actually fixed upon. He made his observations on seventy infants over varying periods of time, in an essentially "naturalistic" study. Kaila used several two-dimensional cardboard models which were held above the infant's crib. These included one resembling a human face; one with the bottom half, below the bridge of the nose, blanked out; one containing just two large light eyes; and a mask containing two distinct dark eyes. He also presented his own face at various angles, ranging from full face to profile.

Kaila's Conclusion that the Infant was Attracted to a Specific Gestalt Configuration

Kaila came to the conclusion that the infant was initially attracted to a Gestalt configuration consisting of the eyes in *en face* position ("der menschlichen Augenpartie"), and he held that "der menschlichen Augenpartie" is the first differentiated object in the life-space of the infant. In accord with Gestalt thinking, he theorized that the central nervous system was so constructed that "resonance" occurred to this particular configuration, which gave the figure psychological "pregnanz."

Spitz and Wolf Add a Third Element: Movement

Spitz and Wolf (1946) tested 251 infants of various races and environments and corroborated Kaila's observations. They also added a third element to Kaila's Gestalt of the *en face* eyes: movement. They found the nodding head or nodding model elicited smiles more readily than one held still (corroborated by Laroche and Tcheng 1963, see above). Also, a grimacing mouth was found to be as effective as a smiling one, so that movement of the mouth rather than specific shape was deemed most important. This finding, of course, threw doubt on such observations as Washburn's (1929) that the smiling face of an adult is the best elicitor of infant smiles. In both Kaila's and Spitz's studies, as in the study of Laroche and Tcheng (1963), maximal smiling to the presented stimulus occurred between three and six months of age, and thereafter the experimenter's face, and models of a face, ceased to be effective. It should be added that the work of Spitz and Wolf also served the important function of bringing these findings to the attention of English-reading workers.

Ahrens (1954), continuing the same approach and using a greater variety of two-dimensional models, came to some rather attractive conclusions. It should be noted, however, that as in Kaila's studies there is much informality in reporting, and because of the complicated nature of the undertaking every procedure could not be done with every child. It is not clear how many different infants were observed in all, but there are a number of charts with specified procedures, subjects, and results. All of Ahrens' observations were made in an institution for infants.

At Older Ages, Greater Detail of Face was Demanded Before the Infant Would Smile

In the second month the most adequate stimulus Ahrens found was a face-sized card with eye-like dots, and a six-dotted model proved more effective than similar cards with one or two dots. At older ages greater and greater detail of a face was demanded before the infant would smile, beginning with the top half of the face, and including the mouth by the fifth month. By seven months these infants required a model with a broad mouth, and by eight months only an actual human face would do.

There was an attempt to refine Spitz's finding regarding movement by varying the speed with which the model was moved, but the results were complex and unsatisfactory. Movement of the models, however, had its clearest positive effect between two and four months.

Ahrens and Comparisons with Animal Behavior

By the time of this study, ethology had appeared as an exceedingly virile movement in animal behavior, and Ahrens made the irresistible comparison, since made by many, between the smile of the baby and the gaping or begging responses of thrush and herring-gull chicks (Tinbergen, 1951). Adult herring gulls have a red spot on the underside of their yellow beaks, and naive chicks will gape (i.e., gaping is "released") when a model of the adult beak is presented at a proper angle (sign-stimulus). In varying the visual pattern by means of a variety of models, one was found which elicited a greater rate of gaping than did the natural stimulus: a small white stick with several dark red rings on it. Such a stimulus is called a "supernormal sign-stimulus" (Lorenz, 1952).

Similarly, in Ahrens' study, smiles in the first month were most readily elicited by what can be considered an exaggeration of the eye-part of the face. The six-dotted model elicited more smiling than a face and in ethological terms, this model could also be considered a "supernormal sign-stimulus." Ethological conceptions of smiling have since appeared in a number of reports (e.g., Koehler, 1954; Gray, 1958; Ambrose, 1960).

What is Known about Smiling in the Congenitally Blind?

☐ Kaila and Ahrens were strictly visual in their theoretical thinking. Neither dealt with the problem posed by smiling in the blind, nor the related problems concerning smiling to sound and other stimuli. What then is known about smiling in the congenitally blind, and what does this information tell us about the mechanisms which bring about smiling?

Before reviewing the literature, a few remarks about blindness are in order. By current standards a child is considered blind if the corrected vision on his best eye is measured at less than 20/200. Considerably less vision is necessary, however, to move about and explore new objects and places (Parmelee, 1959). A regard for bright light is often present when the source of blindness is a defective lens, as in cataracts or in retrolental fibroplasia, but the infant is still considered blind. So-called searching nystagmus, a ceaseless jerky motion of the eye, is usually present after the first month. Its exact nature is not known, but it has been described somewhat romantically as physiological searching for a foveal image.

Thompson Quantified Various Aspects of Facial Movement in Twenty-Six Blind Children

Until recently, there have been only scattered case reports on behavior in congenitally blind infants, and in none of these reports was the degree of blindness detailed, nor are we usually told the etiology of the blindness. Thompson (1941) quantified various aspects of facial movement, via motion-picture film, in laughing, smiling, and crying, of twenty-six blind children, eleven of whom were blind at birth. There was a control group of twenty-nine seeing children of the same age range (seven weeks to thirteen years six months). The only marked difference was a decrease in the amount of facial movements, after six years of age, in the smiles of those who were blind at birth. Thompson felt that this drop occurred because imitation was necessary to sustain the full smiling response. She also found heightened individual differences in smiling among the younger blind children, and she attributed this finding, as well, to the lack of opportunity for imitation. Imitation, she hypothesized, tended also to stylize expression and limit random muscular movement.

Thompson filmed only one child in its first year, at seven weeks and again at eleven and twelve months. It was noted that at seven weeks there was a barely perceptible retraction of the corners of the mouth in smiling; by eleven months there was a round-mouthed smile, and at twelve months the mouth had the more mature elliptical shape. Thompson compared this finding with that of Washburn (1929), who observed the same sequence of development at about the same ages in fifteen seeing infants, and she concluded that smiling appears on a "maturational" basis in the blind.

Gasell *et al.* (1949) reported on a congenitally blind child who smiled on hearing her sister's voice at an examination when sixteen weeks old. Koehler (1954) briefly reported on two cases in which smiling occurred at "the normal time" in one, and in the third month, "just after eating," in the other.

In recent years, soon after the discovery that supra-oxygenation of the incubator causes retrolental fibroplasia (RLF), a degeneration of the lens, a major longitudinal study of sixty-six RLF's was launched at the University of Chicago.

At Four Months, Blind Infants Responded to Human Beings and Demanded Personal Attention

The report on this study by Norris *et al.* (1957) gave no specific data on smiling, but the statement is made that at four months these infants responded to human beings, and demanded personal attention, as do seeing children at the same age. Elonen, the psychologist on this project, has told me privately that all the infants she saw "smiled normally."

Parmelee (1955) reported on questionnaires sent to parents of RLF children in California. He used only those responses reported from written records in baby books (N = 28) and found that the first smiling, with one exception, occured between two and five months. Since these infants were on the average ten weeks premature, the first smiles could be said to have appeared on schedule. Dunn (1962) gathered data in lengthy interviews with parents of twelve congenitally blind children. These included eight with RLF, and one each with retinoblastoma, glaucoma, cataracts and a cortical syndrome (a retardate). He found that with the exception of the retarded infant, all smiled in response to social stimulation between ten weeks and six months, and when corrections for prematurity were made, all smiled at about the same time as their sighted siblings, that is, between one and a half and four months. All, including the mentally retarded infant, smiled spontaneously and "without any instruction by the parents."

As for negative evidence, there are no reports available of blind infants who do not smile. It is safe to conclude, then, that vision is not a prerequisiite for social smiling.

A Study of Four Congenitally Blind Infants

☐ In an ongoing study, limited because, fortunately, blinded infants are now rare, we have been able to directly observe the first elicited smiles, within two weeks of onset, in four congenitally blind infants.

Each observational and testing period averaged about one and one half hours, and a good deal of cinema film has been taken and studied. Our four cases included one of congenital glaucoma and auridia, observed and tested at four months; one with primary vitreous hyperplasia as well as cranial synostosis, observed and tested at three and one half months; one with rubella induced cataracts observed and tested four times between two and one half and six months; one with rubella induced cataracts observed and tested on a weekly basis, between two and four months, and again at six months. In each case the ophthalmological report was bilateral blindness (i.e., vision less than 20/200 in each eye). In addition we noted that while all four infants tended to stare in the direction of bright light there was no visual pursuit of any objects, including a moving pen-light and a dangling red ring (each moved horizontally, vertically, and in a circle and repeated several times).

The Nancy Bayley Infant Mental and Motor Scales (Bayley, 1960) were administered each session and mental and motor performance, aside from visual items, was within normal limits in each case. Developmental tests, however, are a crude estimate of overall development in blind infants since in the first four months all scales are composed primarily of visual items.

The Procedures for Eliciting Smiles

The procedures for eliciting smiling were as follows (Bayley, 1960): "When child is first placed in the crib, stand at his side, lean over with your face about twelve inches above the child's (a) unsmiling for about five to ten seconds; (b) unsmiling but speaking softly ("hello baby," or speak child's name); (c) then smile, nod; (d) make a clicking sound while smiling and nodding; (e) then speak to him softly while smiling and touch his body lightly. Note whether the child responds with a smile to situations (a), (b), (c), (d) or (e), or whether he laughs, and whether he vocalizes. If the smile does not occur on the first presentation, repeat the test at a later time, when the infant is in a contented mood."

In each instance the ostensible eliciting stimuli for smiling were touch, voice, or the two combined, and we were struck that in each of the four subjects these first elicited smiles were extremely fleeting, i.e., they quickly formed and disappeared as in normal eyes-closed smiling in the first weeks of life (see above). Normal nonelicited smiling was also reported in two of the blind infants, and occurred at the usual time, in the first month. Following these observations, we asked parents of older blind children whether the first elicited smiles were of a similar fleeting nature, and we have since accumulated six cases of congenital blindness where such smiling is definitely recalled by the parents.

In the two cases we observed through six months of age, these fleeting smiles gradually changed to normal prolonged smiling, and the six retrospective cases, too, were reported as smiling normally by six months. This has led to two interim hypotheses. (1) The initial elicited smiles were reflexive in nature, since there was the typical sharp onset and almost immediate waning. (2) In these early months prolonged social smiling seems to require visual regard as a maintaining stimulus.

The Most Closely Observed Case—Yvonne, a Girl With Rubella Induced Cataracts

We will now report in detail our most closely observed case, a girl with rubella induced cataracts in whom there were no other significant sequelae. According to the ophthalmologist's report (Akademiska Hospital, Uppsala), Yvonne had less than 20/200 vision in both eyes, and on our tests there was no following of the test objects, including a bright pen-light. She did, however, attend to very bright light, and although no pupillary response was noted, she furrowed her brow to light shone directly on her eyes.

As in seeing babies, Yvonne smiled frequently as she was going off to sleep but never to social contact in the first month (information from mother). Then came a period of reduced nonelicited smiling (also a normal development), followed by social smiling to voice and touch early in the second month (the time of onset for visual social smiling in precocious normals). When observed at two months thirteen days her smiles, while beautiful, were not normal. They seemed to be a series of reflexes firing in rapid succession, so that they appeared and then faded rapidly. Of great interest was the fact that at this visit Yvonne's otherwise constant nystagmus became arrested during a smile. At this time she smiled most often to voices, but also briefly to our test bell and a familiar squeaking toy.

Prolonged Smiles Consisting of a Discrete Series

By three months, eight days, her smiles were rather prolonged, especially to the human voice. However, if one observed closely, the prolonged smile still consisted of a discrete series, i.e., regular twitching at the corners of her mouth. Again, nystagmus halted during the social smile. At this age it was noted that nystagmus was also arrested when she turned toward a sound or, in one series of observations, the source of a breeze caused by fanning. It was also noted that her eyes characteristically turned toward the source before her head turned, and that the eyes were always bilaterally coordinated.

To be continued in the next issue of *The New Outlook*

COMSTAC Report on Records and in Braille

Recorded and braille editions of "The COMSTAC Report: Standards for Strengthened Services" are being made available through the National Accreditation Council for Agencies Serving the Blind and Visually Handicapped, 84 Fifth Avenue, New York, N.Y. 10011.

The recorded edition, on thirteen 10 inch disks, 16 2/3 rpm, is priced at $10 and is presently obtainable. The braille version, in nine volumes, is offered at $6 and will be ready next month. The recorded and braille editions are being made available at cost.

The twelve sets of performance standards for agencies engaged in work for the blind which are incorporated in the report represent three years of study by committees made up of authorities from all parts of the United States.

The standards cover five areas of administration (agency function and structure, financial accounting and service reporting, personnel administration and volunteer service, physical facilities, public relations and fund raising) and seven specific types of service programs (education, library services, orientation and mobility services, rehabilitation centers, sheltered workshops, social services, and vocational services).

Report from Washington

Two major Administration bills of interest to readers were introduced in Congress during late February, and public hearings on both were held in March.

H.R. 5710, the Social Security amendments of 1967, would provide for many improvements in the social insurance, public welfare, and maternal and child welfare provisions of the Social Security Act. Increases in OASDI cash benefits average 20 percent with most beneficiaries receiving a 15 percent increase. The new minimum payment to beneficiaries would be $70 a month instead of $44.

As a result of increases in the taxable wage base to $10,800 after 1973 and in the contribution tax rate to 5 percent each for the employee and employer, the minimum individual benefit would become $288 a month instead of $168 and the maximum family benefit would become $540 instead of $368 monthly.

The bill also provides for an increase in the amount of earnings a retired individual may have without suffering any deduction from his Social Security benefits from $125 to $140 monthly or from $1500 to $1680 annually. For earnings between $1680 and $2880 annually, $1 of Social Security benefits would be deducted for every $2 of earnings. For earnings above $2880 annually, there would be a deduction from benefits on a dollar for dollar basis. Retired beneficiaries aged 72 and over will still be able to have unlimited earnings in covered employment without loss of benefits.

Disabled widows under age 62 who have no minor children in their care would be able to receive widow's benefits under the provisions of the bill. To qualify, a disability must have occurred no later than seven years after the widow's husband died or after the termination of her entitlement to benefits as a mother with dependent children. The definition of disability applicable to disability insurance beneficiaries would also apply to disabled widows, i.e., inability to engage in substantial gainful activity because of disability.

A major gain for disability insurance beneficiaries under the provisions of the bill is their coverage for medicare benefits under Title XVIII on the same basis as for individuals aged 65 and over. Disabled widows and disabled child beneficiaries would also be covered for medicare benefits on the same basis.

Effective July 1, 1969, states would be required to meet their own minimum standards in payments to public assistance beneficiaries. There is also provision for annual review of these standards to take into account increases in the cost of living. Additional federal funds would be available to assist the states in meeting these requirements.

After December 31, 1967, state standards for determining eligibility for medical assistance under Title XIX would be modified so that individual and family incomes cannot exceed by more than 50 percent the highest income standard in that state for determining need for public assistance cash benefits.

H.R. 5710 would also remove the ceiling on the authorization of appropriations for maternal and child health and crippled children's services under Title V of the Social Security Act. Effective July 1, 1967, states would be required to intensify their screening programs under crippled children's services to facilitate early case findings, diagnosis, and treatment as a means of preventing and ameliorating handicapping conditions. In addition, there is provision for utilization of the medicaid program under Title XIX to assist in covering the costs of both screening and treatment under maternal and child health and crippled children's programs.

The bill would also authorize $5,000,000 for fiscal 1968 and such sums as may be necessary thereafter for grants to colleges and universities to enable them to develop and expand programs for training social workers.

The other major Administration bill is H.R. 6230, the Elementary and Secondary Education amendments of 1967. In addition to strengthening the National Teacher Corps program, the bill would strengthen the vocational education program and programs for handicapped children.

The bill authorizes appropriations of $15,000,000 for fiscal 1968 for grants to the states for comprehensive educational planning at all levels under Title V of the Elementary and Secondary Education Act. The major purpose of this new authority is to assist the states to determine educational goals and strengthen programs.

The bill would amend Title VI to authorize grants to institutions of higher education or state educational agencies for the establishment of Regional Resource Centers for the purpose of testing and evaluation services and developing education programs to meet the special needs of handicapped children. These Centers would be designed to assist schools and other agencies in their regions in providing educational programs for handicapped children. Appropriations of $7,500,000 are authorized for fiscal 1968 and such sums as may be necessary are authorized for the four succeeding fiscal years. The bill also authorizes grants to or contracts with public or private organizations or institutions for recruitment of personnel for programs for the education of handicapped children and for dissemination of information about educational programs for the handicapped. I.P.S.

Hindsight

The Good Old Days

Alexander Francis Broadhurst, PhD. and sixty, sat in his office at the university faculty complex and reflected. He was just a little weary this morning, and found himself wondering if the institution's now official policy of retirement at the age of eighty really was as satisfying as he and the others who had pressed for it had believed. He ruminated for a moment over the dramatic progress that had taken place in his lifetime—not so much in technical and social achievements in themselves as in the development of the science of organized action.

"At any rate," he mused aloud, "the policy works only one way. I can insist upon my job for another twenty years if I want it, but I certainly don't have to stay, and it might be fun to go fishing on full pay."

"Did you call me, Dr. Broadhurst?" asked Miss McKenzie, seventeen and a senior electro-secretarial student.

Startled, Dr. Broadhurst remembered that he had not switched off the office communicating system that would automatically have become activated when he entered the room a few minutes ago. He decided to leave it on, but donned the head gear of his near-distance vista-viewer. As he studied the image of the girl, he was struck by her extreme youth—and for that matter, the youth of all of his students these days. It made him feel perceptibly more weary with age than he had before. She repeated her question, and seemed about to rise from her chair in the other office. Interpreting his silence to be one of quiet collection of thought prior to dictation—his usual morning routine—she turned the switch of her desk model auto-steno to "audio," ready for his dictation. Watching her, Dr. Broadhurst wondered for the thousandth time why executives might not just as well operate their own auto-steno equipment. He sighed. The answer was simple enough—the electro-secretarial union, another example of the proven technique of organization, required the physical presence of an employee even though freely admitting the device was foolproof. Dr. Broadhurst thought briefly of Jack Sloane, the new young man in the "typing tank" who was also required, although the auto-steno would trigger the writer without Mr. Sloane's manual aid at any point. Furthermore, the two units between them would have corrected his grammar, automatically used proper punctuation, and had never been known to make a typographical error.

He reached again to one of the switches on his own desk—the one used to interrupt the audio circuit if he needed to sneeze or momentarily halt his dictation.

"This morning, Miss McKenzie," he said with firmness, "I am not going to follow my usual routine. The trip in today was rather more difficult than usual, and I'm bushed. I'll let you know when I need you."

He watched her frown in irritation. Young people these days were becoming awfully damned rigid, and he turned off the vista-viewer with a sense of relief. He had some thinking to do, and this time, remembered to switch off the communicating sound track as well as the image.

Dr. Broadhurst decided not to put on his vista-reader. His fatigue this morning, he considered, might be as much psychological as physical, although the trip in actually had been a bit rougher than usual. He was growing of late to be more and more resentful about the imperfection of the gadgets that the national foundation and the government institute were distributing. What with all the evidence of the capabilities of science, imperfect products could only be the result of administrative waste, bureaucratic inefficiency, or faulty industrial assembly. He might blame the latter on the lazy modern generation of workers, were it not for the fact that all the plants were themselves controlled expertly by machines. Whatever the cause, he was becoming increasingly frustrated with his latest pair of vista-readers. The image was not consistently sharp, the color patterns frequently reversed, and the electrodes became painful after only a few minutes wearing. On top of everything else, he simply could not get a satisfactory explanation from the foundation's officers as to why all of the several viewing variables could not be built into a single, small, and inexpensive unit.

Take this morning's experience, for example. After twenty years of reliance upon a succession of vista-viewers—notwithstanding their imperfection—he had lost virtually all of his ability to get around without them. He had managed to get to the bathroom well enough, but then found that the new model of Shaving-for-the-Blind's automatic razor had clogged. He groped back to the bedroom to put on his miniaturized waterproof mioptoscope—the one designed especially for taking baths, selecting ties, and matching socks. It worked fine, but Dr. Broadhurst was annoyed to have to go back to his regular electric razor. No matter how many times he went over his face, he kept feeling with his fingers whiskers that simply would not reveal themselves in the steamed-up mirror. It really wasn't the fault of the mioptoscope—but then, again, he couldn't trust his fingers either.

He had gotten through breakfast well enough, using his socialscope—really his favorite of the bunch. Driving to the suburban monorail station was quite a different matter. The travelscope he had secured some months earlier from Driving-For-the-Blind, Inc., worked beautifully on the open road, especially since they had also included in the kit the audible speed-detection unit. However, even with his auto's magnified instrument panel (magnified in reverse to make the readings recede to a distance compatible with the focus of the travelscope) he failed to observe that the jet engine's filter had become clogged with carbon particles. He had had to leave the vehicle at a service station, and walk, and consequently, missed his favorite mono.

Dr. Broadhurst got up from his chair and, recalling with an effort what he had learned thirty-five years ago about mobility, personally checked his door to assure himself it was locked. Returning, he opened a bottom desk drawer and carefully searched with hands among the items it contained. He drew out a large envelope, and placed it in front of him. Unfastening the almost broken clip, he pulled from the envelope a bulky document—a much-treasured braille copy of his diploma from the school for the blind at Center City. It was the date inscribed thereon—May 29, 1958—that he studied with his right forefinger. He lost himself in even deeper reflection.

Before going on to college in that year, his counselor from the state rehabilitation office had said that he needed orientation training at the South-central Rehabilitation Center—training which he presumably had not gotten at Center City. During that summer, and two more summers, he received much instruction, and benefitted greatly. College was a breeze. A youth of nice personality and high intelligence with rather good social skills, he got along well with the aid of braille, the talking book in its many forms from many sources, a white cane as an undergraduate and a guide dog in graduate school, a fair amount of financing from state rehab, and a succession of charming young ladies. Dr. Broadhurst smiled.

His smile faded. It was just about at that point in history when the space age had started, with satellites and moon-shots and all that followed. The scientists became intrigued with the problem of blindness. Reading machines, guidance devices, optical probers, compressed speech systems, and scannable tape players—to mention but a few—came out in a rapid series of prototype units. The problem seemed to be basically that of duplicating physiological vision by using the remaining senses.

Throughout the nineteen-sixties and seventies, the parade of ideas and instruments continued, their inventors insisting to the press that this one was the long-sought answer. Meanwhile, blind persons themselves were frequently requisitioned as testees—usually on a voluntary basis, of course.

Dr. Broadhurst remembered well the time he spent several months being trained in the use of one of the mobility devices. He smiled again when he thought of the skill he achieved, having learned to distinguish, for example, when the light was on whenever he entered his room.

Dr. Broadhurst began to feel better. After all, there really had been progress and the situation wasn't really so bad now. The folks at the foundation and at the government institute really had earned the respect and gratitude of all persons with visual impairment, even if the modern units still needed a little improvement to get the bugs out.

"Dr. Broadhurst," said a voice. He remembered that his switch did not cut out incoming calls. It was the voice of Jack Sloane, the new young man in the typing tank. He answered with a hesitant "yes."

"I believe today is the day you invited me to lunch so we might get better acquainted."

Dr. Broadhurst said, "I'll meet you in the lunch room," and reached for his favorite pair of socialscopes and put them on. Adjusting the control, he was reminded that even this unit had its imperfections. Carefully he left the office, noted that Miss McKenzie was talking to her boy friend through the far-distance vista-viewer. As he went down the corridor toward the lunchroom, he mused about the two young people under his supervision. For a blind girl, and only seventeen, Miss McKenzie was doing quite all right. He reflected that she, unlike himself, had never really known the full impact of her congenital blindness. As for the young man in the typing tank, he could not help wondering if Mr. Sloane was also blind. M. R. B.

News in Brief

■ The National Braille Press has announced installation of a full-scale large print division at its headquarters in Boston, Massachusetts. The new division will follow a successful pilot program undertaken at the Massachusetts Correctional Institution at Walpole.

It is expected that the large print division will be in operation by midyear.

■ Study of the laser as a research tool for treatment of retinal detachments, tumors, and inflammatory disease will be one of the research programs in ophthalmology made possible under a $990,000 health research construction award to the Columbia University College of Physicians and Surgeons and the Presbyterian Hospital, New York City, according to the U.S. Public Health Service.

The award to Columbia provides funds for construction of an eight-floor research wing addition to the existing eye clinic. The new wing will bring together in one area the now scattered clinical, clinical research, and basic research activities of the Department of Ophthalmology, and will permit broadened and intensified research in such areas as infectious diseases, biophysics and physiology of vision, genetics, and congenital anomalies involving all tissues of the eye.

■ Two books on vocational rehabilitation of blind and visually handicapped persons in Pennsylvania have been co-authored by Dr. Norman M. Yoder, Commissioner for the Blind in the Pennsylvania Department of Public Welfare, and Mary K. Bauman, diplomate in counseling psychology for the Personnel Research Center, Philadelphia.

The books are entitled *Adjustment to Blindness—Re-Viewed* and *Placing the Blind and Visually Handicapped in Clerical, Industrial and Service Fields.*

■ The American Blind Bowling Association will hold its Annual National Championship Bowling Tournament and Convention in Louisville, Kentucky, June 8-11. It is estimated the tournament will attract between 1200 and 1400 persons.

Interested individuals should write as soon as possible to Mr. Leroy Price, secretary-treasurer, Box 537, Williamsport, Pennsylvania, or to Mrs. Roberta Looney, tournament director, Box 2007, Alexandria, Virginia.

■ The New Jersey State Supreme Court ruled last March that a defective child's right to live is greater than his parents' desire to prevent his birth by abortion.

The court, by a 4-to-3 decision, threw out the suit of Mr. and Mrs. Irwin Gleitman who charged that two physicians were guilty of malpractice in allowing the birth of their son, Jeffrey, who is blind, deaf, dumb, and mentally retarded.

Jeffrey, age 7, was born after his mother had contracted rubella during the early months of pregnancy.

Speaking for the majority, Justice Haydn Proctor said that New Jersey statutes provide criminal sanctions for abortions performed without lawful justification and that "the only justification so far held lawful by the courts is preservation of the mother's life."

■ William J. McClure has been appointed president of the Florida School for the Deaf and the Blind in St. Augustine. Mr. McClure, a veteran school administrator and educator, was formerly superintendent of the Indiana School for the Deaf.

■ Mary E. Switzer, commissioner of the Vocational Rehabilitation Administration, Department of Health, Education, and Welfare, has announced that the title "Regional Representative" within the Administration is being changed to "Regional Assistant Commissioner."

The title change, according to the commissioner, reflects the increased importance roles of the regional offices.

■ The executive committee of the Eastern Conference of Home Teachers recently held its first meeting of the new biennium in Philadelphia. Working committees for the next two years were appointed and preliminary plans for its 1968 convention were discussed.

Invitations for the 1968 convention or other correspondence may be directed to Miss Gladys K. Norman, Eastern Conference of Home Teachers of the Blind, State Office Building, Broad and Spring Streets, Philadelphia, Pennsylvania 19130, or to Mr. Roy J. Ward, Virginia Commissioner for the Visually Handicapped, 3003 Parkwood Avenue, Richmond, Virginia, 23221.

■ Leroy J. Bettwy has been appointed assistant director of the Greater Pittsburgh Guild for the Blind. Mr. Bettwy had served the Guild for three years as a rehabilitation counselor and chairman of its education and psychology departments.

■ National Industries for the Blind has obtained a six-month planning grant from the Vocational Rehabilitation Administration aimed at increasing gainful employment opportunities for multiply handicapped blind persons. The project, which began January 1, is the first performed by NIB using VRA funds.

The specific goals of the project are to determine the ability of multiply handicapped blind persons to be employed in workshops, and to investigate possibilities of obtaining government and industry contracts that would provide continuous gainful employment for these persons.

■ Mr. John F. Likely has been appointed director of the American Foundation for the Blind's business and office management department. He has been associated with the organization since 1946.

■ The appointments of Huesten Collingwood as staff associate and Charles I. Sheldon as assistant director of the National Accreditation Council have been announced by Alexander F. Handel, NAC executive director. (The Council is successor to the Commission on Standards and Accreditation for the Blind, an ad hoc body known as COMSTAC.)

Huesten Collingwood was formerly director of the Personnel and Training Service at the American Foundation for the Blind. During his five year tenure there he was detached for part time professional and administrative service with COMSTAC. In addition to staffing the Committee on Standards for Personnel Administration, he was in charge of arrangements for the National Conference on Standards, convened by COMSTAC in late 1965.

Charles I. Sheldon, who has served as assistant to the Commissioner of the New York City Community Mental Health Board, spent the past four years in administrative and planning operations in the field of mental health, and seven prior years as a staff consultant in health programs for the Westchester (N.Y.) Council of Social Agencies.

Coming Events

May 4-7 National Braille Association, Marriott Motel, Saddlebrook, N.J.

May 21-26 National Conference on Social Welfare, Dallas, Texas

July 9-12 American Association of Workers for the Blind, Miami Beach, Fla.

August 1-5 Blinded Veterans' Association, Hartford, Connecticut

August 21-27 International Conference of Educators of Blind Youth, Boston, Massachusetts

August 31-Sept. 5 American Psychological Association, Washington, D.C.

October 1-5 National Rehabilitation Association Annual Conference, Cleveland, Ohio

October 23-27 American Public Health Association, Miami Beach, Fla.

Current Literature

The Selection of Clients by Social Welfare Agencies: The Case of the Blind, by Robert A. Scott. *Social Problems* (Adelphi College, Garden City, New York), Vol. 14, No. 3, Winter 1967, p. 248-257. An examination of services for the blind, with special emphasis on total amounts of differing types of services (education, vocational rehabilitation, etc.) compared to percentages of the blind population requiring such services.

Vision Needs of America's Children, by J. William Oberman. *The Sight-Saving Review* (National Society for the Prevention of Blindness, Inc., 16 East 40th Street, New York, N. Y. 10016), Vol. 36, No. 4, Winter 1966, p. 217-226. An article based on a paper prepared for the 1965 Congress of the American Optometric Association.

Our Responsibilities to the Deaf Blind Person, by Peter J. Salmon. *Journal of Rehabilitation* (National Rehabilitation Association, 1029 Vermont Ave., N. W., Washington, D. C. 20005), Vol. 33, No. 1, p. 25-26. The deaf-blind client in the rehabilitation service setting is discussed by the Administrative Vice President of the Industrial Home for the Blind, in Brooklyn, New York.

The Blind in Bulgaria, by Ivan Minchev. *The New Beacon* (Royal National Institute for the Blind, 224 Great Portland Street, London, W1, England), Vol. 50, No 596, December 1966, p. 310-312. The author, a Bulgarian journalist, gives a short survey of services for the blind in his country.

The Writing Bug, by Edward Kaulfuss. *The New Beacon* (see above for acquisition information), Vol. 50, No. 596, December 1966, p. 314-315. One in a series of articles about the technical and creative processes used by individual blind writers.

The "Uncommitted" Blind Child: Results of Intensive Training of Children Formerly Committed to Institutions for the Retarded, by Anna S. Elonen, Margaret Polzien and Sarah B. Zwarensteyn. *Exceptional Children* (The Council for Exceptional Children, National Education Association, 1201 Sixteenth Street, N.W., Washington, D. C. 20036), Vol. 33, No. 5, January 1967, p. 301-307. Report on a study of six blind children who had spent varying periods of time in institutions for the mentally defective. These children were removed to a residential school for the blind and given intensive care and special attention.

The Blindfold as Used in Orientation and Mobility Instruction, by Larry Hapeman. *The Long Cane News* (Peripatology Program, Boston College, Chestnut Hill, Massachusetts; Center for Orientation and Mobility, Western Michigan University, Kalamazoo, Michigan), Vol. 2, No. 1, p. 8-10. Mr. Hapeman, who is an Orientation and Mobility Instructor at the Missouri School for the Blind, stresses the advantages of partially sighted persons using a blindfold during mobility instruction as a means of increasing the acuity of the remaining senses.

Severe Visual Impairment—Part I, by Donald Blasch and Loyal E. Apple. *The Long Cane News* (see above for acquisition information), Vol. 2, No. 1, p. 1-4. First in a series of papers prepared by Professor Blasch, Director of the Blind Rehabilitation Program at Western Michigan University, and Mr. Apple, Chief of the Blind Section at Hines Veterans Hospital. Part I concerns reactions and attitudes of the severely visually impaired individual.

M. M. R.

NEXT MONTH: The June issue of the *New Outlook* will include articles on rehabilitation teachers and supervising rehabilitation teachers; the expression of emotion by the blind; plus a picture story on a fashion show conducted for young blind girls by *Seventeen* magazine

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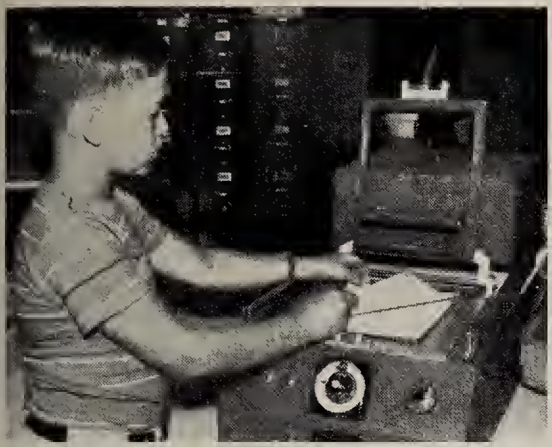

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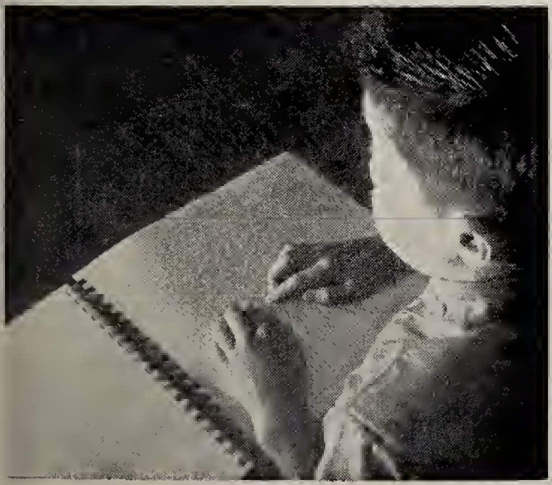

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for Teen-agers

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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

Assistant Editor
Francis P. Naughton

Supervising Rehabilitation Teachers—Summary of a National Institute

A national institute on supervision for rehabilitation teacher supervisors was held in New York City's Sheraton-Atlantic Hotel last December.

The institute, sponsored by the American Foundation for the Blind, was made possible by a short-term grant from the Vocational Rehabilitation Administration, U.S. Department of Health, Education, and Welfare

Supervisors of rehabilitation teachers (or home teachers) throughout the United States have often expressed concern about the need for specific "in service training" in the supervisory process. One group, the Eastern Conference of Home Teachers, under the presidency of Roy Ward, supervisor of home teachers for the Virginia Commission for the Visually Handicapped, has given particular attention to the need for a special seminar on this subject.

At the request of the Eastern Conference of Home Teachers, the American Foundation for the Blind called together a preliminary planning committee to assess the specific goals of an in service training program in this field, and to give advice on the planning of such an institute. Acting on the advice of the participants in this meeting, the Foundation and the U.S. Vocational Rehabilitation Administration explored the possibility of financing this institute. A positive response was received from VRA, and, subsequently, a project proposal was submitted and a contract awarded to AFB. Further assistance in planning the institute was obtained from a second planning committee meeting which set forth the following guidelines:

1. participation in the institute would be by invitation only;
2. the group would be selected from among those persons whose primary responsibility was supervision of rehabilitation teachers in the field;
3. attendance would be limited to a maximum of thirty persons so as to fully realize the advantages of free discussions.

Assistance in drawing up the invitation list was provided by a subcommittee headed by Mr. Ward, who had chaired the two pre-planning meetings. Before invitations went out, the list was also cleared by VRA, the sponsoring agency. At the time invitations were mailed, the executive or supervisor of each participant was also advised of the specific invitation.

The institute was fortunate in securing two able instructors, Professor Hilda C. M. Arndt of Louisiana State University and Professor W. Neil Brown of Rutgers, to share leadership during the five days devoted to a study of supervisory practices. Both have had wide experience in leading in-service training programs in a variety of fields. Neither was an expert in rehabilitation teaching services, but each brought to the institute broad knowledge of the generic principles and methods of supervision.

An orientation and administrative meeting was held for out-of-town participants on Sunday evening, December 4, 1966. The formal seminar sessions got underway at the Sheraton Atlantic Hotel in New York City on Monday, December 5, and continued daily throughout the remainder of the week.

Following are summaries of concepts regarding supervision presented during the institute.

The Nature and Purpose of Supervision

Summary by Dr. Hilda C. M. Arndt, *Professor and Coordinator of Field Work, School of Social Welfare, Louisiana State University, Baton Rouge, Louisiana*

Supervision was defined as an administrative device by which workers are helped to make maximum use of their abilities in giving agency services. There is common agreement that supervision serves two major purposes:

1. the effective carrying forward of the agency's work, the administrative purpose.
2. the development of the staff member's skills and capacities for ongoing professional growth, or the teaching purpose.

Both these purposes are achieved through a stimulating, supportive relationship within which the home teacher experiences not only acceptance and security but also freedom to develop his own unique ways of helping and teaching.

Supervision Is Conceived of As a Partnership

☐ Supervision is conceived of as a partnership even though the partners are not equal in knowledge or skill. Within this partnership there is shared responsibility in all efforts directed toward achieving program objectives. Supervision is worker-focused in the sense that supervisory guidance and help is directed toward helping the teacher gain increasing competence and self-reliance. The agency exists for the purpose of serving clients and both supervisor and supervisee are concerned with providing optimum service in relation to the agency's purposes and resources. While the client, his problems, and his situation must be understood, supervisory attention and help is focused on helping the worker enlarge and deepen his knowledge, understanding, and skills so that he becomes better able to serve not only those clients who are discussed in supervisory sessions but all his clients. Underlying worker-focused supervision is the belief that the teacher must be held accountable for his performance and consequently that the immediate responsibility for each case is his. Only as the rehabilitation teacher is held responsible for each case assigned to him can he be expected to develop increasing capacity for self-reliance and for critical self-appraisal. We can help the teacher do the best of which he is capable but we cannot do his work for him. This philosophy makes heavy demands on the supervisor:

1. to be alert to his own needs and reactions to authority and dependency and to discipline these needs.
2. to individualize each staff member's learning needs, pattern, and tempo.
3. to teach conceptually and to help staff members develop a theoretical framework or structure to clarify the relatedness of new ideas so that transfer of learning from one case situation to another is facilitated.

4. to establish a climate of mutual trust and confidence within which the staff member is free to test new learning, to experiment, and to develop his own way of working.

The administrative functions of the supervisor must serve two purposes:

1. contributing to the organizational framework and processes through which services are provided.
2. helping staff relate to their job responsibilities and coordinate their activities with those of the total staff.

What the Supervisor Must Possess

☐ The successful achievement of these functions necessitates that the supervisor possess positive identification with organizational objectives and program, faith in the contributions of the program, clarity as to the role functions and responsibilities of both self and the rehabilitation teacher, and capacity to use constructively the authority of both his position and his expertise in providing limits and security for staff members. Administrative functions include orientation of new staff members, assignment of responsibilities and assistance to staff in organizing their work, encouragement of a positive identification of staff members with the agency and development of healthy staff morale, help to staff members in understanding and constructively using policies and procedures, assistance in policy-making and implementation, evaluation of supervisees, and participation in program evaluation. All these functions necessitate that the supervisor be able to represent clearly, comfortably, and effectively the agency to the rehabilitation teacher and the latter to top administration. Such representation in turn requires not shallow enthusiasm or subservient compliance but security and faith in the program which permits the supervisor to be comfortable in facing weaknesses or limitations within the agency and in working for constructive change. Emphasis was given to the necessity for clear delineation in writing of the role functions of the home teacher, so that the teacher, the supervisor, and the administrator have congruent expectations. Requirements for the position should be explicitly stated and should relate to the role responsibilities. Finally, standards for performance should be clearly and specifically formulated and shared with the home teacher during orientation so that the latter is clear as to what is expected of him.

Policies and Procedures—How They Are Taught

☐ Policies and procedures are taught through emphasis not only on *what* policies and procedures and *how* they are implemented but also on *why* they were developed. Often staff need to understand not only the intent of the policy or procedure but also the pressures and forces within both the agency and the community which led to establishment of the policy or procedure. The home teacher should be given opportunity to question and to react without fear of criticism or retaliation so that he can drain off some of his tension, perhaps work through any doubts or uncertainties, or discipline his own emotional reactions. Only then is the rehabilitation teacher free to consider objectively the application of the policy and to focus on, and help with, his client's reactions. If application of a given policy has undesirable consequences for clients, the facts should be shared objectively with the administration as a basis for critical review and assessment. Such a report or memorandum is presented not as a complaint but as a problem with supporting evidence and, if possible, with constructive suggestions as to alternatives. Sometimes a staff member can be stimulated to think of other possible alternatives when he criticizes administrative policies or regulations; such a step underscores that the right to criticize implies responsibility to participate in constructive steps toward change. Consideration of the realistic problems may lead to more sympathetic understanding of the administrative position.

Morale Is Closely Related to Other Factors

☐ Staff morale, defined as the ability of a group to work together consistently and persistently in pursuit of a common goal, frequently is closely related to several factors: the degree of faith the supervisor has in his supervisees; their faith in him and in each other; belief in the program and pride in its achievements; and a sense of truly participating appropriately in the various phases of the agency's work. The supervisor frequently influences morale by the model he presents: his dependability, consistency, and reliability; his impartial behavior; and his willingness to support his staff and to direct administrative attention to their needs or to their realistic concerns.

The Teaching-Learning Process

Summary by Dr. Arndt

Learning is not merely an intellectual process but involves the total organism. If growth and change are the goals of learning, more is involved than cognition and motor skills. New knowledge may lead to new adaptations of the organism; some re-organization of ways of thinking, feeling, and behaving; and internalization of values, standards, and ethical principles. Such learning involves human transactions and dynamic relationships between teacher and learner, supervisor and supervisee. The teaching-learning relationship among adults is sometimes precarious because of the adult learner's concern over his dependency on the teacher, the threats of the teacher's expertise and of the learner's feelings of inadequacy, and any strong emotional reactions to authority on the part of either supervisor or supervisee. If the teaching-learning relationship is to promote growth and change, then the teacher must present a consistent professional model with which the learner can identify. The teacher consistently should demonstrate by action, as well as in words, the ethical convictions and the values which underlie professional decisions and actions and should be able to state clearly and firmly those values which guide his activities. His goal should be not to encourage subservient, submissive learners, patterning thinking and actions after the teacher's thoughts and behavior, but to encourage learning that is integrated and consequently available for creative use in the learner's own way.

For learning to be integrated certain conditions are essential:

1. the learner must feel free to reveal his thoughts, feelings, and behavior and to tolerate some discomfort as he critically examines them and perceives the need for change;

2. the teacher must respond in relevant and reliable ways that provide consistent guidance and information to correct erroneous perceptions;

3. the supervisory climate must be sufficiently supportive that the learner need not feel defensive;

4. the necessary information must be freely given with accurate timing as to the individual's readiness;

5. the learner must be allowed freedom to experiment, to find his own way of using himself in the service of others, to make mistakes and learn from them, providing that clients do not suffer in the process;

6. the learner must be encouraged constantly to assess his own performance critically so that he can assume responsibility for his learning;

7. the learner's needs and patterns of learning must be individualized.

The outcome of learning is dependent on the inter-relatedness of the learner's motivation, capacity, and opportunity to learn. Motivation and capacity must be assessed at the time of application for employment and continuously thereafter. Assessment of opportunity for professional learning includes assessment of the quality of supervision provided, the adequacy of orientation to work responsibilities, the balance between the demands of his assignments and the staff member's ability to carry out these assignments, and the caliber of the staff development program provided by the agency.

The Principles of Learning Discussed and Applied

☐ Principles of learning discussed and applied included the following:

1. goal-directed behavior is dependent on clearly formulated, reasonably attainable goals, on realistic hope of attaining these goals, and on understanding of the necessary steps by which the goals could be attained. Consequently, each staff member should be clear as to his role responsibilities and the standards against which his performance will be measured.

2. learning proceeds from the known to the new, from easy material to the more difficult.

3. excessive emotional demands stimulate painful self-consciousness and arouse negative reactions unless the staff member experiences support in the supervisory relationship.

4. learning is integrated only when it becomes conscious.

5. learning is facilitated if knowledge is partialized and focused.

6. the cumulative effect of learning is increased through sequential organization of experiences and through progressive repetition, comparison, and contrast. Teaching must focus on concepts and principles, and a framework or structure should be taught which clarifies the inter-relatedness of material and facilitates transfer of learning from one situation to another.

Individual conferences are a primary method of providing supervisory help. Advance preparation should be made by both parties. Whenever possible, the supervisee should be helped to find his own answer and should be encouraged to undertake balanced critical self-assessment. Simultaneously, realistic needs for information, guidance, and direction should be met adequately and promptly. The supervisor should be alert to emotional reactions and any repetitive patterns indicative of learning blocks or limited performance. Timing should be gauged so that the supervisee can be helped to develop more self-awareness. Various expressions of resistance, and suggestions for helping the rehabilitation teacher deal with both his own resistance and the resistance and hostility of his clients.

Memos, Telephone Calls, and Tape Recordings

☐ When distances and lack of staff make frequent conferences impossible, memos and telephone calls are utilized as supervisory means. Safeguards, however, are needed, including the need to be sensitively alert to the feelings of the rehabilitation teacher and to relate to his individualized needs in a non-judgmental way. The suggestion was made that exchange of tape recordings could be used in long-distance supervision since the recordings permitted more development of ideas than memos, capitalized on the feelings transmitted through the tone of voice and inflections, and gave the impression of less permanence and rigidity than the written word. Attention was given to the supervisor's responsibility in motivating the staff member to give his best and in stimulating him to continuously "better his best."

The values and limitations of the supervisor accompanying the rehabilitation teacher in visits to clients were discussed in detail with divisions of opinions as to the effects of this supervisory method on the rehabilitation teacher, the client, the relationship between them, and the supervisory relationship. Distinction was made between the use of demonstration and observation in orienting the new employee and the supervisor accompanying the staff member to assess the latter's effectiveness and to teach more efficient ways of helping clients. In the latter instance the supervisor must examine thoughtfully and responsibly the meaning of the experience for the client as well as for the rehabilitation teacher and the degree to which the supervisor is exercising professional discipline and is focusing on developing the professional competency of the staff member rather than on meeting his own needs. The costliness of this measure must be realistically assessed. Of prime importance are two considerations: the supervisory relationship must be comfortable and must be characterized by mutual trust and confidence; the client's confidence in the helping intent and the competence of the rehabilitation teacher must not be weakened in any way.

Communication—An Important Aspect of Supervision

Summary by W. Neil Brown, *Associate Professor, Graduate School of Social Work, Rutgers—The State University, New Brunswick, New Jersey*

Many of the problems that arise in the supervisory process can be seen as the results of faulty communication. This includes communication between the rehabilitation teacher and the supervisor, between the rehabilitation teacher and the other team members or other agencies, or between the rehabilitation teacher and the client. At least three problems were discussed that seem to have a communications focus. These are:

1 the controversial area of team visiting by teacher and supervisor;
2. confusion about teacher job description;

3. differences between teacher and supervisor related to agency policy and procedures.

The discussion of each of these areas revealed differences in perception or understanding about job, policy, or procedure on the part of the teacher and the supervisor. Communication is most effective when ideas proceed from that which is known to that which is unknown. Obviously if the supervisor and the teacher know different kinds of things and no effort is made to make a match here, there is a problem.

Defining the Term "Communication"

☐ It seems appropriate here to try to define what we are talking about in the term "communication." A dictionary definition would be: "An interchange of thoughts and opinions by words, letters, or messages." In a more refined attempt, Theodore M. Newcomb states that "Every communicative act is viewed as a transmission of information, consisting of discriminative stimuli, from a source to a recipient. . . . Thus in the simplest possible communicative act one person, A, transmits information to another person, B, about something, X." George M. Mead discusses empathic responses in relation to good communication, making the point that clarity of communication is enhanced when people like one another.

Several factors have been isolated as having a bearing on the effectiveness of a communications process. Some of them are: clarity, specificity, personal needs, perception, motivation (commitment), and feedback. We often refer to this as the use of professional jargon. By "jargon" we mean the indiscriminate use of words that have special meaning to a particular professional sub-culture. This can be a two-edged professional sword, since jargon is often useful as an expedient shorthand to convey essential meanings to members of the same professional discipline; but, where there are different professional backgrounds, the same words can convey different meanings, or worse, be meaningless.

The Impact of Needs, Perception, and Motivation

☐ The impact of personal needs, perception, and motivation on communication has been pointed up by researchers in small group theory and spelled out most clearly in what is referred to as "reference group theory." The essence of this thinking is that what any person puts into a communications process is largely conditioned by what he brings to the process from other reference points in his surroundings—family, kind and amount of education, exposure to social institutions, and nature of life experiences. The existence of these reference points is indicated by the term "levels of communication." Such expressions as "affective-cognitive," "latent-manifest," or Newcombe's "Cathectic-cognitive" or "inner forces-induced forces" are used to denote differing levels or layers of communication. Other writers have spoken of "the hidden agenda" which any person brings into any group participation.

Ward Hunt Goodenough in *Cooperation in Change* (chapters on beliefs, values, wants, needs, felt-needs) and Edward T. Hall in *The Silent Language* have emphasized the importance of cultural patterns on what a person brings to the communications process.

The following statements taken from discussions during the institute indicate that the participants have had some experience with this matter of latent forces getting in the way of communication: "The worker just has to resist. . . ." "The worker has a need. . . ." "I can't teach you any more—the agency has new policies. . . ." "We make the interpretation we get. . . ."

Each of these statements is taken from a different supervisory situation that was discussed during the institute. In each of them there is implicit something more than the words reveal. It is this something which makes for the problem in communication.

Distortions May Affect Communication

☐ Needless to say, this whole area encompassing personal needs, perception, and motivation has tremendous communications significance for both teachers and supervisors in relation to blindness. The degree of blindness, a person's reaction to this handicap, and the overall feeling about self must be faced and worked through to some acceptable resolution; otherwise distortions in perception and motivation are bound to affect communication.

From the viewpoint of the supervisor, it must be faced that there are some facts of administration which cannot be shared, as a whole or in part, with staff. The other extreme of this—the hush-hush air of some administrators and supervisors—can be harmful too. The supervisor must work toward creating a climate of openness. The more insecurity there is in the supervisor-teacher relationship, the more there is the likelihood that one, or both, will shield themselves by obscurities in communication.

> Employees tend to develop their abilities when they feel a reasonable degree of security and confidence in relation to other people, particularly their organization superiors. Without this feeling of security, the employee interprets suggestions as criticism, is suspicious of his supervisor's motives, and may feel threatened and fearful. He either becomes antagonistic toward his superiors or wants to lean on them. He "plays his cards close to his chest" and cannot let himself go. With a reasonable degree of security, he can afford to let himself go, to reach out, to expand.

This excerpt from *Staff Development—The Supervisor's Job,* (Training Manual #6, Federal Security Agency) seems to reflect both the task of the supervisor in creating open communication channels and the implications of failure in achieving this.

The Importance of Feedback

☐ Finally, one aspect of communication which cannot be ignored is what is referred to in communications research as "feedback." The skillful supervisor must have some way of ascertaining how he is being heard or understood by the teacher. Case recordings, letters, memos, and face to face conferences are important manifest feedback clues. The teacher will also communicate in less tangible ways such as interpretation of agency policy and adherence to or rejection of policies and procedures. It is the supervisor's responsibility to be alert to the clues given him in feedback and to use these in the professional development of the teacher.

An Orderly Approach to Service

Summary by Professor Brown

The institute's participants agreed that it is the supervisor's responsibility—in addition to myriad administrative functions—to teach, stimulate the rehabilitation teacher, interpret agency policies, and to bring about optimum learning conditions. Much of this teaching can be done, and often most effectively, through indirection—in the kind of model the supervisor provides in his own approach to the supervisory task.

Some guidelines for performance mentioned were:

1. focus on specific aims and goals of the service;
2. focus on specific needs and skills needed by each teacher to carry out the job;
3. clarity in job description and standards of performance required by the agency;
4. evidences of teacher growth are concomitants of learning but they are not supervisory objectives. The supervisory focus has to be on improved service to clients;
5. supervision, to be truly effective, has to be a sharing process on the part of both teacher and supervisor;
6. the cumulative effect of learning accrues through sequential organization of experiences (simpler to more complex), and through progressive repetition in comparison and contrast.

Adherence to these foci would be reflected in the following ways:

1. the supervisor's planning for the conference and the converse expectation from the teacher;
2. the materials used and how they are developed—case records, direct observation, evaluations;
3. the content of the conference in relation to the supervisor's focus;
4. the emergence of data that tend to shift, deepen, or confirm the supervisor's educational assessment of the teacher and thus indicate areas for future supervisory concentration.

Case Records

Summary by Professor Brown

Case records are among the most important tools in the supervisory process. Case recording should be tailored to further the purposes of service. For supervisory purposes, the term "case recording" is used to encompass case records, correspondence, and referral summaries. Case recording can be done in *process* (probably most useful for teaching purposes) or *summary*. Some agencies are experimenting with brief recording which can best be described as *telegraphic*. In all case recording, important teaching can be done about the need for selectivity and discrimination as to what material is essential and appropriate to the needs of the service.

A Guideline for Caseload Management

☐ Caseload management is the term commonly used to describe a method of handling large numbers of cases with maximum service to the largest possible number of clients. A guideline for optimum caseload management is frequency of contact in relation to urgency of need. However, when using this rule of thumb, it is advisable to devise some scheme for assuring that all cases receive some service. A common approach to this is the development of a tickler file system to keep essential data readily available about the status of the total caseload. Finally, it must be acknowledged that there is a realistic limit beyond which we are not talking about caseload management but rather makeshift expediency—we are reacting as best we can to limitations of staff, time, and facilities.

The Process by Which We Move a Client

☐ Referral is the process by which we move a client in need of a particular service which we do not provide to a resource which does provide the needed service. Optimally, the referral provides a bridge, a relatively smooth transition from one service to another, or, from the state of receiving one service to a collaborative situation. Referrals can be made by telephone but when this is done, a letter should follow summarizing pertinent information, and clearly explicating the problem and what is expected from the source to which the client is referred. Wherever possible, a written referral is to be preferred.

Commonly used resources for referral by rehabilitation teachers are: occupational therapy and physical therapy, public health nursing, cooperative extension services, and local family and child welfare agencies. Other resources are used depending on the particular availability of services within a given geographical area.

The Supervisor's Responsibility for Staff Development

Summary by Professor Brown

We have commented on the supervisor's role in staff development. This is commonly referred to as the teaching component of supervision. One of the ways of dealing with this responsibility is through group supervision. Group meetings are useful for dealing with matters of common administrative and content interest. Group supervision has a primary value of developing togetherness, a "we" feeling, and a sense of uniformity around policy and procedural matters. Like individual supervision, it should be protected against undue therapeutic focus. It is not a group therapy session.

Some guidelines for handling group meetings are:

1. group meetings are most effective when the group is homogeneous;
2. a group cannot start cold, the leader must provide the initial framework;
3. the leader must assume responsibility for preparing a plan and delineating a process of handling;
4. the leader should provide an overall body of knowledge;
5. the leader has a responsibility to present his own point of view (there should be an indication of possible flexibility);
6. criticism in a group situation should be withheld or handled extremely carefully;
7. if material is to be used in the meeting, material in which there are more positives than negatives is definitely to be preferred;
8. if there are any glaring errors to be pointed up, they should be sufficiently general that no one individual or district need feel threatened by them;
9. in planning for a group meeting, the plan is usually better if it includes more rather than less material that one can cover;

10. the leader should be prepared to deal with hostility in the group.

Some additional tools for staff development: use of committees; development of clearly stated objectives; use of consultants; development of meetings in series; staff meetings.

The Evaluation Process

Summary by Dr. Arndt

Periodic evaluations have administrative purposes as well as advancing the teaching–learning process. The supervisor's resistance to undertaking evaluations of staff members was discussed in relation to two factors:

1. the problem of making accurate and objective judgments on the performance of another;
2. the realization that the evaluation process necessarily included critical appraisal of the supervisor and the help he provided as well as of the performance of the rehabilitation teacher.

Essential Ingredients in an Evaluatory Process

☐ Advance preparation by both supervisor and supervisee and full participation by both are essential ingredients in a productive evaluatory process since evaluation should be viewed as an opportunity for the rehabilitation teacher to develop increasing capacity for critical self-appraisal. Preparation should include review of the standards of performance against which the teacher's work is to be measured as well as review of a sample of the teacher's records, of memos submitted preliminary to conferences or in confirmation of conferences, of statistical reports, and of other pertinent data including observations of the teacher's relationships with other agency staff members and with community persons, and of his participation in staff meetings, committees, and interagency conferences.

Whenever possible, the rehabilitation teacher is asked to begin the evaluation conference with discussion of his self-assessment, the supervisor affirming, clarifying, enlarging, questioning, and adding as indicated. Strengths and indications of progress should be recognized and approved. Areas in which the rehabilitation teacher is either not meeting standards or not working up to full capacity should also be clearly identified. The latter should be examined with the intent of specifying any learning blocks or limitations as areas on which the teacher and the supervisor will be focusing work together in the months ahead. Suggestions can be invited as to how the supervisor can be more helpful in assisting the teacher to progress in these areas. The supervisor should avoid half-truths or vague comments that leave the staff member uncertain as to what is being criticized. The supervisor should have evidence on which to back any negative assessments. Any problem in presenting criticism clearly and specifically should be examined as to whether the problem stems from inadequate evidence or the supervisor's guilt in not having offered adequate help at the appropriate time.

Evaluation Inevitably Arouses Anxiety

☐ The evaluation process inevitably arouses anxiety within the rehabilitation teacher since the latter's view of his performance is tied up with his self-image and his feelings of adequacy. Different staff members will react in different ways but time must be allowed in the evaluation conference to deal with these emotional reactions. Similarly, prior to and during the conference the supervisor must make every effort to be aware of his own emotional reactions and to discipline them so that he can focus on helping the rehabilitation teacher assimilate his growing self-awareness and a realistic, objective appraisal of his performance and his needs in relation to continuing professional development. Senior staff members who have limitations which probably cannot be overcome should be helped toward a realistic view and acceptance of both their capacities and limitations so that they can function adequately and comfortably within their limitations. When termination of employment is necessary, this should be discussed clearly and frankly with respect for the individual's feelings and inherent worth, even though his capacity and performance in his current position is questioned.

The Right to Know and Experience

☐ Whatever conclusions and administrative actions grow out of the evaluation process, every staff member has the right to know and experience that this evaluation is confidential and is shared only with administration and not with colleagues. When the rehabilitation teacher evidences anger or considerable upset over the evaluation, it may be well to caution against sharing these immediate reactions with colleagues, simultaneously explaining why his suggestion is offered.

Both the evaluation conference and the written statement should be viewed by supervisor and supervisee as "stock taking," as an opportunity not only to assess past performance in relation to goals and standards but also to set goals and guidelines for the future to promote ongoing professional development.

Recapitulation

by Dr. Arndt

The supervisor is an enabler who fulfills his administrative and educational functions through both supervision of the rehabilitation teacher and planning and conducting staff development programs. These important responsibilities necessitate that the supervisor consistently and persistently engage in critical self-scrutiny and invest time, thought, and energy in advancing his own knowledge and competency in his chosen field. Supervision is conceived of as an administrative process which emphasizes teaching and learning toward the goal of helping the rehabilitation teacher develop his professional capacities in order to make his maximum contribution to the agency's program of services. The rehabilitation teacher is held accountable for his own work and, consequently, the supervisor's responsibility is to teach and administer so that the rehabilitation teacher progressively develops self-reliance and capacity for self-evaluation. Fulfillment of this responsibility implies professional dedication and whole-hearted investment of self because of belief in the agency's contribution coupled with conviction that people, both staff members and clients, continue to grow and change.

The Role of the Rehabilitation Teacher— A National Point of View

DORIS P. SAUSSER, ACSW

Mrs. Sausser is director of the Community Services Division at the American Foundation for the Blind

It is almost like delving into ancient history to look back at the beginning of home teaching, but the past is prologue to the present and future, and retrospective investigation can be rewarding.

Home teaching began with a religious, humanitarian motif, when Dr. William Moon and Mr. John Rhodes established the Pennsylvania Home Teaching Society in Philadelphia in 1882. Its purpose was to teach braille in order to provide a means of reading the Bible and other religious literature and in order for the blind adult to receive "spiritual light and guidance." This organization continues to exist. Connecticut, in 1893, reportedly was the first state to offer home teaching to blind adults as a public service program.

Through the following years, the home teacher in this country assumed many more duties and became much more than a teacher of braille. Among other things, he became a friendly visitor, counselor, dispenser of gratuities, seller of blind-made products, travel and craft instructor, and case finder. Home teachers were the first persons to provide service to blind adults in their own homes. They were, in fact, the first group to provide service to blind adults. Eventually, the term "home teaching" was accepted as denoting a variety of services given to blind adults usually in their homes. In a fairly recent study, home teachers, in responding to a questionnaire, listed an aggregate of ninety different duties. One state currently lists thirteen different job requirements in the job description of home teachers—counselling, communication skills, handicrafts, home management, orientation and mobility, talking book service, recreation, personal grooming, assistance in use of optical aids, promotion of sales of blind-made products, assistance in developing education opportunities, casefinding, and teamwork with vocational counselor. It is understandable how home teachers came to be all things to all people. They filled gaps in services when there was no one else to provide them.

As other disciplines (social work, vocational rehabilitation, occupational therapy) began to recognize they also had a role in serving blind persons, many home teachers gave up parts of their functions to these other professions. Some home teachers, however, still cling to functions of other disciplines, and are experiencing separation pains. In other instances, this hybridized nature of home teaching is continued through administrative practices and superimposed job descriptions. Deep-seated emotional problems, problems of child welfare, severe family problems, are treatable by other profes-

This article is adapted from a speech the author presented during a training program for rehabilitation teachers in regions VIII and IX held in Los Angeles last fall.

sionally qualified personnel, just as vocational guidance, evaluation, training, and placement are the responsibility of vocational rehabilitation service.

Another indication of the lack of clarity of the role of the home teacher is in the multitude of titles used to encompass responsibilities assigned to this position. By job classification it is still known in various states and agencies as "caseworker for the blind," "visiting teacher," "counseling teacher," "teacher counselor," and other names. The Cosgrove report, which eventuated from a nationwide study of home teaching, placed emphasis on the teaching aspect of home teaching. In conformity with this thinking, the curriculum for home teachers at Western Michigan University was developed at a graduate level.

Salary Levels Have Been Abominably Low

☐ There is another problem area which has been typical of this profession. Historically, salary levels for home teaching have been abominably low. They have ranged from $1000 to $1500 less than salaries for rehabilitation counselors. The personnel and training service at the American Foundation for the Blind has reported it has not had a vacancy for a home teaching position listed for about three years—which may reflect the uncertainty of executives and administrators about where the field is going professionally. Apparently most positions have been filled, and personnel has been trained locally. (This, of course, doesn't include the graduates of the Western Michigan program.) The last position filled through AFB's referral was at a salary of $5000 per year. In collecting more recent data from other sources, it was found that one of the states with fairly high salary ranges listed salaries for a home teacher with a bachelor's degree as a minimum requirement at $5800, and for a master's degree in social work, home teaching, or rehabilitation counseling, at $6200. The willingness to accept graduate degrees in allied professions may be due to the reality of the situation (Western Michigan can't graduate enough home teachers to fill the need for qualified home teachers) or it may reflect continued confusion about the home teacher's role and the professional background necessary to fill that role.

According to BLS, salaries for home teachers have increased 87 percent in the past decade

A study of salaries in our specialized field, undertaken last year by the Bureau of Labor Statistics has brought information about salaries in twenty-six selected administrative and professional positions, including home teachers, up to date. This is the third of three salary surveys by BLS in our field which have been conducted at intervals of approximately five years. Salaries in selected professional and administrative occupations in services for the blind in the last five years have increased approximately 28 percent, while in the past decade salaries for home teachers have increased 87 percent.

In 1955, the average salary for home teachers was $3150; in 1961 the average had increased to $4510, and in the latest study to $5880. This is still significantly below salaries for vocational rehabilitation counselors and social caseworkers and is the lowest salary reported for any of the occupations, except for certain categories of classroom teachers. For comparison purposes, the median annual salary in 1966 of social caseworkers in this specialized field was $6320; for orientation and mobility instructors, $7000; and for vocational rehabilitation counselors, $7080.

The number of home teachers in the field increased from 185 to 265 in the past ten years, a rate of growth of 43 percent. The rate of blind home teachers decreased from 92 percent in 1955 to 88 percent in 1961 and 81 percent of all home teachers at the present time. Blind home teachers in 1966 were paid just about the same as their sighted counterparts, which is a definite improvement from the situation in 1961 when blind home teachers were paid $900 less.

Past Salary Levels May Reflect Past Job Requirements

☐ Perhaps the history of salary levels reflects to some extent the general educational and experiential background required for this position in the past. Many home teachers had completed only high school; others had some college work. One writer some time ago said that home teaching is a vocation and not a profession "in that it is generally entered into through an informal apprenticeship." The efforts of the American Association of Workers for the Blind to develop a professional base for home teaching have been important, although some people have had considerable feelings about the double standard for certification of home teachers in the United States and those in Canada. Most agencies now require a minimum of a college degree in recruiting home teachers, and many seek staff with graduate degrees. Some administrators will hire college graduates with the understanding that graduate training will be secured within some specified time limit.

Today, need for the all-purpose teacher-counselor is on the wane

However, home teaching is coming of age as a profession. The pioneering days are about over, and the need for the all-purpose teacher-counselor is on the wane. It is commonly accepted that the rehabilitation of the adult blind is a joint endeavor of a multi-discipline team, of which the home teacher is a very important team member with a specific contribution to make.

Setting the Standards in Home Teaching

☐ It is now almost three years since the Board of Trustees of the American Foundation for the Blind, at the request of many specialized agencies, agreed to sponsor a Commission on Accreditation and Standards. One of the areas to be considered in setting standards was home teaching. The difference of opinion that existed even in the minds of persons responsible for setting up the committee functions became apparent when home teaching was assigned to the Committee on Standards for Social Services and not to the Committee on Education. However, the chairmen and staff associates of these committees conferred and by agreement the Committee on Social Services continued to carry responsibility for developing standards for the service of home teaching. The immediate question tackled was that of job title, and the committee decided the title "Adult Education Service" was the most descriptive one.

As everyone knows who attended the 1965 AAWB conference, this title was not acceptable to the majority of home teachers and supervisors of home teachers. Considerable time was spent in running through the gamut of titles already existing in the field (just as the committee had done and, again, discarding them). Eventually, it was recommended that the title be "Rehabilitation Teaching," and later, the Eastern Conference of Home Teachers formally went on record endorsing this title. The standards, as approved at the National Conference on Accreditation held in December, 1965, state that "rehabilitation teaching is substituted [for home teaching in order] to reflect a more comprehensive image of what this service entails, its goals and objectives." It reflects the gradual and increasing trend toward relating this service to education as the major professional discipline while recognizing that teaching special skills to blind persons has clearly become identified with the broad objectives of the rehabilitation movement.

Rehabilitation Teaching, the new title, is defined

Rehabilitation teaching of visually handicapped persons is defined as "teaching and guiding persons through a course of instruction designed to help persons carry out daily activities without the sense of sight. It encompasses specific and identifiable teaching techniques and skills in communication, home orientation, home management and personal management." In addition, an understanding of the nature and problems incident to blindness is necessary in order to work constructively with the client—but problems outside of the educational or learning area should be referred to other appropriate professional personnel. This is where the team approach can be used most effectively in meeting the needs of the blind adult.

Rehabilitation teaching in the context of COMSTAC standards is not considered as regular academic classroom teaching, vocational training to achieve vocational skills and goals, or a comprehensive recreation program. It is an educational service which can be given in several settings wherever the client or student is situated—in their own home, the home of relatives or friends, a convalescent or terminal care institution. A rehabilitation teaching service must above all be purposeful, with definite and obtainable goals for each individual whose needs give direction to the teaching. (The word "individual" is used with some hesitation since there is resistance on the part of some educators to the term "student" for the adult blind recipient of this specialized service. There is little question anymore that this is a service for adults.)

Recognition at the grass-roots level—is it there?

One wonders whether home teaching is being fully recognized as a profession at the grass-roots level where job descriptions are written and approved by civil service boards of state governments, and where salary ranges are determined. Is there an appreciation and recognition of the need for "plus" knowledge of human behavior and the impact of blindness on the blind adult and his family? Ruth Kaarlela described this approach as "therapeutically oriented education"—but it is related to education and not social casework or group work, or vocational guidance.[1] These other services are greatly needed but should be provided by other staff members, by other community agencies, and in some instances by volunteers.

Summary

☐ To sum up, it seems, at least from the multiplicity of job titles currently in vogue at state levels, that the movement toward recognizing the distinctiveness of this role and contribution to the adjustment to blindness is developing steadily, but quite slowly. There is need for greater recognition, on the part of administrators and even colleagues, that the important goal and purpose of home teaching is to enable a blind person to use his strengths and capacities to overcome the limitations within himself and his environment and to become a happier, better adjusted member of the community.

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1. Ruth Kaarlela, "Home Teaching—A Description," *The New Outlook for the Blind*, Vol. 60 (March, 1966), pp. 80-83.

Psychological Implications of the Multiply Handicapped Person

SAUL FREEDMAN

Mr. Freedman is supervisor of the Psychological Testing and Counseling Services at the New York Association for the Blind in New York City

By the nature of greatly expanding efforts to gain insights as to the multifacted influences of various handicaps, there has come the realization that psychological implications are frequently as functionally limiting as the physical disability itself. Only through recognition and understanding of these implications can rehabilitation of an individual and his restoration to the community be attempted.

Webster's New Collegiate Dictionary defines disability as "an absence of competent physical, intellectual or moral power, fitness or the like." The synonym is given as "inability." Handicap is defined as "any disadvantage that renders success more difficult." A partial comprehension of the psychological implications, and an awareness that they always exist with every loss, is essential to the restoration of "an absence of competent physical, intellectual power, etc." It offers the possibility of making increasingly less "difficult" the chances of "success." It makes more feasible the goals of rehabilitation.

Those familiar with rehabilitation literature will readily recognize that the somatopsychological problems of each handicap, whether deafness, blindness, tuberculosis, orthopedic involvement, or any other, have been treated in their relationship to the disease entity, i.e., the psychological aspects of blindness, of tuberculosis, and so on. No one can seriously consider that there is a personality of deafness, blindness, or tuberculosis. There are to be found significant similarities among all disabilities as to the emotional response experienced by the individuals sustaining the loss, the reaction of their families, and the attitude of the community at large. Pioneer efforts to offer programmed services for individuals possessing more than one physical handicap have been made by such institutions as the Perkins School and the Industrial Home for the Blind. Only in the past five years has an increasing use of the term "multiply handicapped" been found in rehabilitation literature.

In 1964, MacFarland offered the definition for "multiply handicapped" as meaning "a person suffering from two or more relatively severe disabilities."[1] He added, "There are few blind clients with whom you will be working who do not have disabilities in addition to their blindness. These would include, for example, mental retardation, a single or bilateral amputation of arms or

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[1] MacFarland, Douglas C.: "Serving Multiply Disabled Blind Persons," *The New Outlook for the Blind*, September, 1964, p. 206.

The material in this article was first presented at a conference of the New York State Federation of Workers for the Blind last fall.

legs, deafness or hardness of hearing, emotional instability, or old age—just to mention a few." In his study of services offered to blind children in New York State, Cruickshank indicated that one-third of the people studied had additional handicaps.[2] MacFarland thus offers a competent generalization that few blind individuals do not have additional disabilities. Cruickshank is more specific in terms of numbers of multiply handicapped blind persons, while indicating that the group is smaller.

The Need for a Broader Attitude and Comprehension about Psychological Implications

☐ The gross disparity between these two authors, both very knowledgeable, suggests a difference in their definition of the term "multiply handicapped." It may well be that most of us, unlike Dr. MacFarland, have defined, used, and interpreted the word "handicap" too narrowly—as applying to those individuals experiencing an obvious or hidden physical defect which limits their physical capacity to work. Kessler stated "The presence of a physical defect, however, does not constitute disability. Only when the defect causes an actual restriction of activity or arouses a psychosocial prejudice will it be so defined." Thus, by the author's use of the term "prejudice," he does give due recognition to the influencing force of the attitudes of the family and the community at large. Effective rehabilitation services require a broader attitude and comprehension, by all of us concerned, about the psychological implications of the process of being handicapped. We must place stress upon the concept that this is a process. The importance of this shall be emphasized shortly.

References pertinent to the psychology of the self-concept

Schneiders stated "Some persons are physically handicapped but others are even more seriously limited by reason of mental disability, moral or spiritual decay, savage economic limitations, lack of educational privileges or social crippling. . . ."[3] Relating to this is the term "collective-life-handicap." It is a term used in social work to refer to "any disability (physical, mental, or emotional) which limits or threatens the patient's normal range of social intercourse, association, and enjoyment of fellowship."[4] Both preceding references are pertinent to the psychology of the self-concept. In a person's attitude toward himself, does he find acceptance or self-rejection? Does he see himself as secure? Does he feel adequate? Does he have a degree of self-worth? Does he feel the community's attitudes toward him are positive? It is fruitless to attempt to stereotype the psychological implications of any disability groups. Barker, Glonik, and Wright pointed out "there is no evidence of a relationship between kind of physical disability and kind of adjustment behavior."[5]

Disability for every individual sustaining a loss has a very unique meaning for him. Comprehending the psychological implications for each individual's loss is the core of the rehabilitation process. At the time the individual sustains a physical loss, he experiences a disability. His concept of what the disability means to him may be a sum total of his impressions of that disability prior to his loss. To the degree that this loss has changed his self-concept, there may be observed the process of becoming handicapped. Handicap has been defined as any disadvantage that renders success more difficult. Public apathy, discomfort, ignorance, and prejudice, in so far as they reinforce and contribute to the individual's negatively changing self-concept, accelerate the process of becoming handicapped. Thus, this may be called a psychosocial handicap. It would appear, therefore, that every individual experiencing a physical loss has experienced, to a greater or lesser extent, this psychosocial handicap. It follows that despite the apparent singularity of the physical disability, i.e., blindness, or deafness, or cardiac involvement, or orthopedic involvement, each individual experiencing a physical loss has to some extent experienced being multiply handicapped.

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A Self-Image That Reflects the Attitudes of Other People

☐ A disabled child—blind, deaf, tubercular, or otherwise—develops a self-image that reflects the attitudes of his parents, siblings, and peers toward his disability. If these attitudes are negative and limiting, a self-image develops which produces a functional handicap. These negative attitudes are debilitating. They restrict maturational growth, exploration, and learning. They foster lack of confidence, social withdrawal, and inappropriate behavior. Some well-intentioned parents, by insulating their disabled children from life as it is every day, are responsible for their children experiencing the process of becoming handicapped. We have observed the positive effects of minimizing this handicapping process through parents who themselves have made successful adjustments to their child's disability. The parents' positive and constructive attitude has been mirrored in the self-image and development of their child. On the other hand, some blind adolescents and young adults suffer such severe overprotection that they experience particular difficulty in their gait, mobility, and general orientation. Neurological examinations to determine the etiology of these difficulties on many occasions have proven to be negative. These additional disabilities appeared to be an outgrowth of the handicapping process. Organically, these adolescents and young adults had sustained but the single disability of blindness. The psychosocial aspects of their disability, however, had made them multiply handicapped.

School experiences that may reinforce a negatively developing self-concept

Exclusion from the usual public and parochial school systems through segregation into a residential school may serve to reinforce a negatively developing self-concept. The lack of normal social intercourse with nonblind peers may convey the impression of difference. Feelings of inferiority can develop. The process of becoming handicapped develops further. Separation from family, siblings, and friends may deepen the development. Association with other children similarly disabled structures a self-concept which states, "I am different. I don't belong in a sighted world (if they are blind). My friends are all blind. I can't associate with sighted people and they can't associate with me. What are the things that I can study and do? What will they allow me to study and do?" In some individuals, there is observed a complete or partial immobilization for physical, intellectual, emotional, social, maturational, and vocational growth. They have become multiply handicapped. These youngsters' goals will, for the most part, be socially self-restricted and directed toward functioning within a narrow, segregated, disabled subgroup of society.

Sheltered shop facilities offered by many agencies tend to continue the reinforcement of this increasing negative self-contempt. If these work facilities remain segregated, this young person will tell himself, "Even outside school I have to associate with others who have the same disability. These are the only people I can work with. The person I can associate with must also be disabled." This psychosocial handicap with a self-concept of inferiority continues to pervade all areas of functioning and thought.

The Adult's Changing Self-Image

☐ The adult who becomes disabled may experience a changing self-image which is in direct proportion to the stereotype and prejudice he suffered prior to his disability. He anticipates being slighted or treated differently. He may recognize and exaggerate the discomfort and uncertainty others feel toward him. He becomes hypersensitive. The process of becoming multiply handicapped begins. He begins to accept the role of inferiority and incompetence which he feels is appropriate for a disabled individual. He may begin to expect or demand special treatment or understanding or sympathy or privilege. If his demands are met and reinforced, so will his changing self-image of inferiority, and the process of becoming multiply handicapped continues. If, despite his disability, he is able to continue in his work environment, there is less likelihood of severe changes in his self-image. If the condition is progressive, as is observed with particular eye diseases, more and more energy is directed toward its concealment. The fear of discovery, in and of itself, can precipitate a change in attitude which will create a psychosocial handicap. Other people may react to the attitude and reinforce it. The same form of threat exists within the family as to one's role as husband, father, breadwinner, wife, or mother. The individual's attitude toward himself, his self-image, can be as restrictive and damaging as the disability itself.

Attitudes of Agency Personnel—Implications for the Client

☐ As agency personnel, we have observed how our own attitudes have had psychological implications for the disabled client. We have sometimes labeled clients "good," depending upon the degree to which they have been willing to become passively dependent upon us. The client who questioned programs, refused to be labeled, and insisted upon being treated as an individual in having his ideas acknowledged was sometimes called "bad" or "troublemaker." Inadvertently, we may have done much harm to some disabled individual by making him fit into our stereotype and framework of what we thought they were capable of doing as a disabled person. By our insistence upon taking over their lives, lavishing services without exploring needs, and insisting upon doing things for them, we may have perverted their self-image and made them multiply handicapped.

We might speculate that preferential treatment for blind people as a disability group, by legislative enactment, has contributed further to the development of a negative self-image. Such legislation tells the individual and the community at large "this person is less able to compete; he needs special assistance."

Not allowing ourselves the opportunity of getting involved

We have observed professionally trained personnel, such as psychologists, social workers, and psychiatrists, refuse to offer therapeutic services to disabled individuals on the theory that they were not familiar with the problems of that disability. They, and perhaps we also, have made the error that there is some form of mystique that we must fathom before we can offer therapeutic intervention to a disabled person. Through such prejudice and ignorance, we have rejected the individual because of his disability, without allowing ourselves the opportunity of getting involved with his problems. We have reinforced for him the concept that he is different. We have, in effect, told him "Go to a facility where they specialize in treating people who are different, like you." The individual has been made to feel handicapped.

When frustrated because of our lack of skill or facilities to offer services to individuals with more than one physical disability, we have been prone to concentrate either upon our own singular specialization or totally reject the individual by stating that it is the other disability which is the primary one. We may have received referrals from agencies specializing in work with the orthopedically disabled individuals because the person was blind as well. We have referred mentally retarded blind individuals to other agencies when we lacked the facility and insight to offer service to a retarded person. While there is no simple solution for this problem, we must recognize that through our feelings of frustration and perhaps realistic limitations, we have contributed to this individual's becoming multiply handicapped.

In all of the preceding statements, particular stress has been placed upon the recognition that there are psychological implications with every form of disability. The attitude of the disabled person, his family, friends, educational, vocational, and recreational mileu, as well as the facilities which might offer him rehabilitation services, influence whether and to what degree he will experience the process of becoming multiply handicapped.

Recognizing the limitations of our competency, skill, and facilities

It is healthy and realistic for us in all rehabilitation settings to recognize the limitations of our competency, skill, and facilities. We must be prepared to share our staffs and facilities to meet the needs of the individual who possesses more than one physical disability. We must ensure that we contribute to the maintenance and building of a positive self-image. We must recognize that to the degree that physical loss has changed the individual's self-image, he has experienced the process of becoming multiply handicapped. Apathy, discomfort, ignorance, and prejudice on the part of the individual, his family, and his educational, recreational, and vocational environments influence the evolvement of his self-image. In order to effectuate meaningful rehabilitation, we must recognize that vocational placement in and of itself is not sufficient and can be most harmful. To achieve rehabilitation, we must first evaluate each individual, offer him individual treatment services, followed by specific

(Continued on page 204)

Seventeen Fashion Show for Teen-agers

"Please Do Touch the Merchandise," a fashion show especially for blind teen-agers, was presented in early March in Washington, D.C., for more than 100 girls from Washington and the surrounding area.

Believed to be the first of its kind, the show was sponsored by *Seventeen* magazine, in cooperation with The Hecht Co., a Washington department store, and the Division for the Blind and Physically Handicapped of the Library of Congress.

Seventeen is planning at least three more shows in other cities in late 1967 and early 1968. The next show is tentatively scheduled for Los Angeles in mid-September.

The magazine executives hope that eventually local department stores and agencies for the blind will cooperate in sponsoring shows based on the *Seventeen* plan.

At the Washington show, attended by wives of Cabinet members, models were members of the teen board of The Hecht Co. After the show, they walked through the audience so the blind teen-agers could touch the clothing.

The fashion commentary included such phrases as "crunchy as celery" to describe a new crinkle fabric, and "delicious as sherbet" to give a picture of a strawberry-colored dress. Each girl was given a brailled program illustrated with raised line sketches of the costumes and swatches of material, as well as a subscription to *Seventeen*, which has been published in braille since last October.

Far Right: Lucretia Roane, 17, of the Maryland School for the Blind, looks at the epaulets on Nancy Hart's white knit suit while Mrs. Orville Freeman, wife of the Secretary of Agriculture, looks on.

Upper Right: Teen-age model Carol Blue (center) shows the shoulder detail on her short cotton pant dress.

Lower Middle: Laurinda Steele, 16, reads the braille program to Mrs. Hubert H. Humphrey, wife of the Vice President.

Lower Left: Nancy Hart, a model from the teen board, marches down the runway.

Field Testing the Tactile Speech Indicator

ANNETTE DINSMORE

Miss Dinsmore is a specialist in Services for Deaf-Blind Persons at the American Foundation for the Blind

One of the greatest disappointments in Alexander Graham Bell's life was that his invention, the telephone, offered no correction for his wife's deafness. For years, deaf people have been unable to enjoy the convenience of the telephone because of their inability to hear, and have been, in effect, shut out. Similarly, deaf-blind people have been barred from telephone communication, a factor which has added to the isolation created by their double handicap.

During the last few years, however, efforts have been made to give deaf-blind people a practical means of using the telephone. The Illinois Bell Telephone Company invented the Tactaphone and the New York Telephone Company developed the Sensicall. Each instrument has to be installed and cannot be moved.

A third device which enables deaf-blind people to communicate by telephone is the Tactile Speech Indicator, the greatest advantage of which is that it is portable and, like a hearing aid, can be used with any telephone. This instrument was adapted for touch-reading from the original instrument, the Speech Indicator, made for sighted deaf people and using visual signals.[1]

The Tactile Speech Indicator consists of an electronic device similar to a small transistor radio and is battery-operated. There is an on-and-off switch which also controls volume, and a jack on one side where attachments can be plugged. In the center of the top there is a raised button capable of vibrating to electric impulses. There are two types of attachments, either of which can be used against the earpiece of the telephone: one a tiny microphone, the other a magnetic pick-up in a suction cup.

Whenever this device is sold or given to a deaf-blind person, he must receive direct instructions in the use of the telephone and in the recognition of various vibrations and voice signals, i.e., dial tone, busy signal, or ringing at the other end of the connection. Each user must employ a standard introduction such as: "My name is John Smith; I am deaf and cannot hear what you say. I have a device that will enable me to understand your answers to my questions if you say 'no,' 'yes-yes,' or 'please repeat.' Do you understand?"

The spoken answer "yes-yes" gives two vibrations on the device; "no" gives one, and "please repeat" gives three. In using the Morse code with the Tactile Speech Indicator, the speaker says "dit" for a dot and "dah" for a dash. The Alphabet Division Method, which also can be employed with the Indicator, is a technique used to spell out words by identifying each letter in its section of the alphabet. It is a slow method, but it is useful when information is needed and the Morse Code is unfamiliar.

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[1] The Speech Indicator was developed by Hugh Moore, electronics engineer of the Los Angeles School System for a project in telephone communication for the deaf directed by Dr. Ray L. Jones in the Leadership Training for the Deaf at San Fernando Valley State College.

Thirteen Indicators Tested during Past Year

☐ The American Foundation for the Blind had a number of Tactile Speech Indicators constructed, and during the past year placed thirteen of them for field testing. Seven answers to testing questionnaires showed results as follows: only two of the testers used it every day, but six of them used it on an average of five times a week. The seventh used it from twenty to fifty times a week. All seven can dial without assistance, and can recognize the voice when someone answers at the other end of the line. All seven use the standard introduction, but one states that strangers occasionally mistake this introduction for a nuisance call and hang up. All seven use the Morse code with close associates, while only one employs the Alphabet Division Method. All seven have used the indicator away from home successfully, while only four have tried it in a phone booth. Three of these were successful but one found too much interference from traffic noises, which were picked up by the device, and confused the signals. Six of the seven had succeeded in placing calls through a switchboard. In answer to a question about how they could tell their phones were ringing, four said they had fans attached to their phones, two (who have a little vision) had lights attached, and one felt for the vibrations when expecting a call.

The problems testers had with the Tactile Speech Indicator

All seven deaf-blind testers had some problems with the device. The problems were: trouble with volume control (two testers); interference or static on long distance calls (one tester); interference or static in local connections (three testers); confusion when telephoning someone on a party line (one tester); difficulty in telling when the phone was answered if the person picked it up at the first ring (one tester), and difficulty in adjusting to variations in human voices (one tester). When using the Morse code, it was found that the quick signals for "yes" and "no" became confused with the dot and dash signals.

The Tactile Speech Indicator proved helpful to testers in several ways

In discussing ways the indicator proved helpful, six commented on the joy of communicating with friends; four said they felt security in knowing the device could be used in emergencies; three mentioned a sense of increased independence; two had found it useful to gain services by calling the grocer, plumber, or cleaner. One seemed pleased because he can now give his wife instructions when she is out shopping for him and calls him from the store.

One found a number of extra uses for the device: to detect the ringing of a doorbell when a caller was expected; to detect unrecorded parts of a tape in her tape recorder; and to receive Morse code from a friend across the room with no need for the personal contact necessary in all other methods of communication.

All seven stated that the device proved very helpful and put them in contact with the outside world. The tester who used the device twenty to fifty times a week has set up "office hours" when she works at her table sitting in a position to feel the fan blowing when the phone rings. She talks regularly with four friends who have learned the Morse code, and, she adds, "with six Navy men."

The Expression of Emotion by the Blind

The two papers comprising this article are offered as representative of a wide variety of papers on the expression of emotion, and may be of interest for two reasons. The first is that there is at least one major theoretical problem involved, that of the origin of expression and of facial expression in human beings, whether sighted or blind. The second reason is that our understanding of the origin of expression of emotion may well be related to behavior patterns among the blind, and among blind children particularly, which we may wish to study and perhaps to change.

This second half of the article begins with a continuation of "Smiling in Blind Infants and the Issue of Innate Versus Acquired" by Dr. D. G. Freedman, Committee on Human Development, University of Chicago.

This is the second half of a two-part article on the expression of emotion. The first appeared in the May New Outlook.

The two papers in this article have been brought together by Leslie L. Clark, director of the International Research Information Service at the American Foundation for the Blind

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. . . We have tentatively concluded that the arrest of nystagmus and the directing of eyes towards voice and sound were manifestations of highly motivated states which enabled processes, isolated by disease, to become temporarily integrated. Goldstein (1963) offers an admirable theoretical basis for such an interpretation.

In the third month, Yvonne was observed "peering" at her hands, a maturational event that occurs regularly in seeing children, i.e., the hands are brought before the eyes and wiggled there for long periods of time. When she did this, Yvonne's eyes converged to the center and down, as if she were trying hard to see her hands. It seemed unlikely that shadows had been cast on the retina since these observations were made under dim lighting conditions. Also, she did not touch her face, so that tactile sensations were not a factor. It appears, therefore, that the motor pattern of wiggling the hands before the eyes may operate independently of peripheral stimulation. Even if one argues that forms must have been cast on the retina, it is still of singular interest that this phenomenon developed, for it is now clear that very little visual stimulation is necessary for its performance. Evolutionally this may have come about as a "guarantee" that eye-hand coordination would occur.

The hands-before-the-eyes behavior dropped out a few weeks after it appeared, and at the sixth month visit Yvonne was still not reaching for objects introduced by sound or touch.

My thanks to Michael Dunn, now an M.D., who helped me search the literature and who carried out a pertinent research project (Dunn, 1962) as United States Public Health Summer Student Fellow, University of California Medical School. Thanks also to Nina Freedman, Dr. J. Kovach and Dr. J. A. Ambrose for their help. My own observations were carried out while affiliated with the Langley Porter Neuropsychiatric Institute, San Francisco, and the Institute for Medical Genetics, Uppsala, Sweden; I am indebted to both institutions for their support.

Smiling in Infants with Other Anomalies

☐ Clearly, these observations must be checked in a substantial series of blind infants, and we plan to do so.

No careful studies of smiling in deaf infants have been reported but we have obtained retrospective data on two deaf infants whose course of smiling was described as completely normal.

The deaf-blind who smile—reports by Goodenough and Thompson

The deaf-blind reported in the literature smile. Darwin's (1872) reference to Laura Bridgeman has already been mentioned, and Goodenough (1932) reported on a one-year-old girl, blind and deaf from birth, in whom smiling and laughing were appropriately expressed. Thomson (1941) reported that four deaf-blind cases were not markedly different from her blind subjects (see above) in laughing, smiling, and crying.

Infants with Down's syndrome (trisomy of the twenty-first chromosome) may smile normally and with full eye-to-eye contact, albeit several months later than normal (personal observations; see also Benda, 1960), and Dameron's (1963) remarks to the contrary seem to be in error. Although no studies are in print, I have questioned workers in the field and the general opinion was that smiling is present in all but the most severely impaired defectives. If there is any generalization to draw from this, it is that smiling tends to remain intact despite substantial biological impairment.

Innate Versus Learned

☐ The notion of "innateness" has never sat well in American Psychology and the early work of Dennis (1932) was the first attempt to contest such an interpretation of smiling. Dennis and his wife observed a pair of infants over their first year under conditions of minimal stimulation. He found, as did many of the above authors, that the human face was the best eliciting stimulus for smiling, but it should be noted that since by design he avoided vocalizing to the babies, he gathered little data on responsiveness to voice.

Dennis concluded that the smile appeared as a response to reduction in tension, although he admitted his data did not necessarily suggest such a position. He wondered why, for example, the baby did not smile at its milk bottle and to other objects associated with reduction in tension, but achieved no clear answer to these questions.

Dennis and the position that smiling is an innate response to a human face

In dealing with the position that smiling is an innate response to a human face, Dennis referred to his own review of the literature on congenitally blinded children who had had cataracts removed. He wrote, "In accounts of their early visual reactions (after the operation), there is nothing to suggest that they instinctively smiled at the human face, or even that they instinctively chose the human face for fixation." There was apparently nothing to suggest the opposite either, and Dennis himself agreed that facile counter arguments are available, such as the waning of instinct.

In the section concerned with normative data in smiling, we have seen that time of onset and amount of smiling is affected by environmental events. For example, Brackbill (1958) has shown that smiling can be increased and decreased by schedules of social reinforcement, while Gewirtz (1963) and Ambrose (1961) have shown that time of onset and amount of smiling can vary with the amount of social stimulation. However, these studies were not concerned with the origin of smiling or the neurophysiological mechanisms involved. Recently, however, Schneirla (1959) addressed himself to this problem on a theoretical level.

Schneirla and an anti-instincuvist pro-learning position

Schneirla, in taking an anti-instinctivist pro-learning position, postulated that the smile is derived from a rudimentary "grimace" (early nonelicited smiling in our terminology). The "grimace," he hypothesized, is induced by low-level stimulation of the facial nerve and it thereafter becomes associated with social stimuli. Schneirla termed even the developed smile of three months a "grimace," apparently because it served the argument that smiling is gradually differentiated from early diffuse responses.

Since no data were offered to support the case that stimulation of the facial nerve elicits early eyes-closed smiling, we can assume Schneirla considered some form of external stimulation logically necessary, and his discussions on other topics in the same article and elsewhere (1961) bear this out. However, the work of Weiss and others (Weiss, 1954) shows that external stimulation is not necessary for all CNS activity, so that data and not logic is needed in this case.

Many infants never showed nonelicited "grimace" smiling, yet they developed normal social smiling at the usual time

In our own work (Freedman, 1965) we have found that many infants never showed nonelicited "grimace" smiling, yet they developed normal social smiling at the usual time. Also, when nonelicited smiling was present, the gradual and continuous development from diffuse to well-formed smiling, postulated by Schneirla, was not observed. Instead, there was a distinct noncontinuity between early nonelicited smiles and later social smiles which entail eye-to-eye contact. Other observers agree that before smiling to the face develops, there is a non-smiling period in which eye-to-eye contact first takes place (Spitz and Wolf, 1946; Ahrens, 1954; Wolff, 1963), and by this time nonelicited smiling appears only rarely (Wolff, 1963).

In addition there is great variation in onset of social smiling and some infants are extremely precocious under routine hospital care (see Gewirtz, 1963; Laroche and Tcheng, 1963, for literature on age of onset). We have closely observed one infant whose first social smiles, i.e., smiling with his eyes on the caretaker's face, occurred at three days of age. This infant smiled consistently thereafter, exhibiting both "nonelicited" and elicited smiling throughout the first month. The infant was under routine care so that it is less pertinent to speak of learning and more pertinent to speak of a precocious capacity for smiling.

A learning view should account for the fact that certain stimuli are better elicitors than others

Finally, a learning view, such as Schneirla's or Dennis', should account for the fact that certain stimuli are better elicitors of smiling than others. As discussed above, the best eliciting stimuli are normally the human voice and the human face, whereas various nonliving objects, more directly associated with the reduction of tension, are not smiled at. Schneirla has dealt with this point by suggesting that if the feeding bottle could be visualized during feeding instead of "just felt," the bottle would henceforth elicit smiling. However, Wilson (1960) has performed such an experiment and shown this is not the case: various stimuli visually associated with feeding were quite ineffective in eliciting smiles.

We may conclude that learning or Pavlovian explanations can tell us something about the relative strength and frequency of smiling responses under different environmental conditions, but they tell us little regarding the origin of smiling or the mechanisms involved.

Studies which say heredity is playing some role but say nothing about the role's nature

What then, do the "nativists" tell us? In our own work, we have found that identical twins exhibit greater concordance than fraternal pairs in time of onset and in amount of social smiling (Freedman, 1965). Such studies, of course, say only that heredity is playing some role but nothing about the nature of this role. Ethological thinking, on the other hand, has led to the postulation of a specific neurophysiological mechanism (see section on visual elicitation of smiling), but unfortunately the evidence indicates that this hypothesis is also inadequate.

It is based on the assumption that a specific visual stimulus, a moving face-like pattern, acts as a "releaser" by disinhibiting the "innate releasing pattern," which results in smiling; but as we have seen smiling occurs regularly in the absence of vision. The moving face-like pattern must therefore be considered a facilitator of smiling rather than a primary elicitor.

Cases from animal behavior in which identification of a "releaser" turned out to be misleading

Lehrman's (1954) sweeping critique of ethology contains several parallel cases, from animal behavior, in which identification of a specific "releaser" turned out to be misleading. One famous example, "short neckedness" in birds (as in hawks), had been identified as a "releaser" of escape responses in gallinacious chicks (Tinbergen, 1948); subsequent work has shown the relationship to be a good deal more complex (Curio, 1963), and in one study, gallinacious chicks which showed this escape response had apparently learned which birds not to fear (Schleidt, 1961).

Representatives of nativistic and learning positions have drawn too narrow a picture

In general, the fight between nativistic and learning positions has helped very little in clarifying the mechanisms behind smiling in human babies. The representatives of both positions have so far drawn too narrow a picture, and we are reminded of other similar arguments. For example, anti-instinctivists often cite Kuo's (1932) work which makes the point that pecking in chicks is not an innate response but is dependent on the physical juxtaposition of head and heart in the egg (Lehrman, 1954; Schneirla, 1960). An instinctivist, however, can answer this argument easily by pointing out that the positions of the fetal head and heart, etc., have been channelled by evolutionary changes which must ultimately be reflected in changes at the genetic level.

On the other hand, as Lehrman has pointed out, when ethologists have spoken of organized patterns of behavior as "innate," the door to further investigation of this behavior has often been shut. For to hypothesize that a behavior is innate can only mean that the behavior appears to be evolutionally meaningful and/or that it appears to be a reflection of the organism's genotype. Beyond this, only careful investigation of the behavioral pattern will help us understand it. Beach (1955) makes the same point.

Conclusions

☐ It is probable that cybernetic models will eventually provide an adequate theoretical basis for dealing with tangled problems like the present one. For the present, however, the evidence that the infant's smile is "innate," given the above use of the term, can be found in much of the data cited. The lack of ability for deferred imitation, i.e., imitation removed in time from the act imitated, eliminates imitation as an explanation of the young infant's smiling to non-smiling stimuli; social smiling in blind infants precludes some sort of (hypothetical) primitive imitation; the reflexive nature of early social-smiling observed in blind infants suggests an electrophysiological discharge; the twitching-myoclonic pattern of early nonelicited smiling, present in the seeing and in the blind, is similarly suggestive; the greater concordance in smiling patterns within identical-twin pairs compared to fraternal-twin pairs implies hereditary control; the inability, despite repeated attempts, to demonstrate either tension reduction or conditioning as the cause of early smiling implies a non-learned aspect; in the nonblind, over the first months, the facilitation of smiling with specific "supernormal" visual stimuli suggests an ethological-type "releasing" (read facilitating) mechanism; facilitation of the earlier smiles by a high-pitched voice can be similarly interpreted.

Some less direct evidence for innateness

Some less direct evidence for innateness is: the universal presence of smiling in the congenitally blind although facial movement, in general, is greatly reduced after six years of age; the fact that smiling is intact, even if slow in developing, in defective children. Finally, there are the strong but tautological arguments regarding evolutional function. For example, the joy the baby's smile creates in the caretaker, and its continued importance as a signal of mutual positive feeling throughout life.

In conclusion, we who investigate behavior can benefit from the embryologist N. K. Brooks (quoted by Openheimer, 1954): "When we say the development of the egg is inherent must we not also say what are the relations with reference to which it is inherent? When we say it is induced, must we not also say what are the relations with reference to which it is induced? Is there any way to find this out except scientific discovery?"

Summary

☐ The literature on smiling in infancy was briefly summarized and data were cited which appear to support the thesis that smiling in infancy is an "innate" expression. Particular emphasis was placed on observations of blind infants since ethologically oriented theories hold that smiling comes about as an "innate" response to certain visual "sign stimuli." It was found that blind, deaf, and deaf-blind infants smile, which indicates that no single sensory channel is the exclusive releaser of smiling. On the other hand, it was found that vision definitely facilitated smiling since blind infants did not exhibit normal prolonged smiling until five or six months of age; instead, they exhibited fleeting, reflex-like smiling. Finally, examination of theoretical positions in current innate versus acquired controversies pointed-up weaknesses in each position.

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The Mimicry of the Blind

Georges Dumas

The observations, of which I report the summary and the interpretation, have been made, three years ago, at the Institution Nationale des Jeunes-Aveugles, and at the Association Valentin Hauy; more recently at the Institution Nationale des Jeunes-Aveugles and several times upon some isolated blind that I have known in diverse circumstances. I have taken, in total, thirty-three observations.

In order to avoid any confusion, I state again a distinction which in the question at issue is capital, that of the spontaneous expression of the emotions and of mimicry.

When, under the influence of joy, the facial nerve is excited, it has an effect upon the ocular sphincters, of which it elicits the contraction. The result of this contraction is to diminish the apparent size of the eye as far as to mask sometimes the sclera and to fix some wrinkles, well known under the name of crow's feet, upon the skin of the outward angle of the orbit.

At the same time, the excitation from the facial nerve provokes the contraction of the buccinator, of the levator of the wing of the nose and of the upper lip of the zygomatic major, of the zygomatic minor, by such a manner that the fleshy mass of the cheeks is drawn upwards and outwards, that the nose appears to lengthen at the base and at the upper part and that it shapes between the wing of the nose and the median part of the cheeks a groove known under the name of nasolabial.

I wish to say, in going over these contractions in detail, that they are the spontaneous expression of joy.

But, if for reasons of politeness or of expediency, I wish to assume a cheerful countenance or indeed only if depicting the joy of another or my own, I assume the expression in order to illustrate my words, I perform the act of mimicry.

Mimicry—The Voluntary Imitation of Spontaneous Expressions

☐ Mimicry is the voluntary imitation of spontaneous expressions. This distinction is not made in most of the recent works which deal with the expression of the emotions. It is nevertheless capital, and, when one neglects it, he exposes himself to complete confusion.

Mimicry can be very easy as in the preceding case where it suffices to lightly activate some striated muscles of the face in order to realize the mimicry of joy.

This report was translated from the *Bulletin de L'Académie De Médecine,* 15, 1932, pp. 607-610 by Jere Wilson.

Mimicry is more difficult when reproducing facial expressions connected with inhibition

It is indeed more difficult when it is a question of reproducing facial expressions by inhibition, as those which characterize fear. In this case, the orbicular relaxes in enlarging the eyes, the tonus of the zygomatics and the levator diminish, the cheeks tend to draw in and the tonus of masseter and of the temporal diminish likewise, the lower jaw, drawn by its own weight, tends to sag and to open the mouth.

As we have no way of reproducing the hypotonus of a muscle by the action of the will, we would never imitate the expression of fear if we would not fake our mimicry, and we have faked it by activating the antagonistic muscles of the ocular sphincter, of the muscles of the cheeks, and of the masticatory muscles. That is to say, in order to give the illusion of a relaxed sphincter, we contract the frontal; that in order to give the illusion of cheeks which draw in we contract lightly the triangularis of the lips which lowers the commissure and that, in order to give the illusion of the jaw which drops, we make function the mylohyoid and the anterior belly of the diagastric. I scarcely need to point out how this mimicry is defective when one compares it to the mimicry of joy.

We content ourselves nevertheless in the circumstances where we should, for the sake of the needs of expression, to put on under an accepted form more or less reserved, the mimicry of awe or fear.

In the two cases we imitate, but in the second, we fake our mimicry like an actor who puts rouge upon himself and we obtain only approximate effects.

Two Hypotheses About Mimicry

☐ How do we realize the act of mimicry? One could conceive under two different forms the way we imitate and make two hypotheses. The first shall consist of considering that they are our own spontaneous expressions that we voluntarily imitate after having taken consciousness of them in muscular and cutaneous feeling. The second consists of believing that we imitate other persons' expressions which we know by appearance.

In the first case one attributes to the act of mimicry an individual origin; in the second, one attributes to it a social origin.

Each explanation appears to have, a priori, its *vraisemblance,* and I have myself in former times chosen the first when I have studied the expression of the emotions. I make honorable amends. It is the second that it is necessary to take.

A Service to the Blind—Instructing them in Mimicry

☐ It would be an obvious service to the blind to instruct them in the art of mimicry which, rendering them more similar to us, would contribute to drawing together; at the same time it would contribute to adapting them to this communal life from which their blindness isolates them.

Gathering Information on the Origins of Mimicry

☐ In order to settle the matter, I have started from the idea that if a person blind from birth can be capable of emotional mimicry without having ever seen the spontaneous expressions of others nor his own, he assuredly knows his expressions by his muscular and cutaneous sensibility; that is to say, if a person blind from birth is incapable of reproducing by mimicry his own expressions, it is for the sole reason that he has never seen these expressions expressed by others or by himself. By experimenting with some persons blind from birth, I should then be informed upon the origins of mimicry.

I ran the risk, and this was from fear, of obtaining some half results, that is to say, of rudimentary, diminished mimicries which would have given evidence of the participation of the muscular and cutaneous sensations. The results have been, happily, as clear as I was able to wish it.

My subjects, all selected among those blind from birth in order to eliminate the part of the visual memory, for the most part were between twelve and twenty years of age. Some of them, of the professors, were between thirty-five and forty years of age.

Subjects express their emotions normally by some spontaneous reaction

According to the normally sighted persons who live with them, and according to that which I have seen, they express their emotions normally by some spontaneous reactions. There are relatively few of them, however, in which they can state with the entire expressions, for the peri-ocular muscles which serve to facilitate the functions of the eye and to protect them, are often affected in their functioning for want of exercise, but in the most part these muscles may react a little, and in several ones, the reaction of the ocular sphincter is almost normal under the influence of emotions such as laughter. The play of the cheek area and peri-buccal muscles is, it goes without saying, normal.

Here is D, twenty-one years old, blind as a result of a purulent ophthalmia. You have had fear sometimes, I asked him. Affirmative response. Question: can you assume a frightened countenance? Response: I don't know what it is. Some result for anger, sadness, and joy. D has had, nevertheless, just now a well executed laugh with respect to a minor incident. I ask him to take up again the expression that he had. After several efforts he gives up. He is mediocre even in the expression of the simple smile.

Same result with E, forty years old, a devotee of self analysis. I understand very well, he said, what you ask me but I don't know how I express upon my countenance joy, sadness, or anger. Question: don't you sense at least that your joyous countenance, laughing, is not the same as your sad countenance? Response: no. I have recorded only some of the losses.

They have no memory of spontaneous contractions of the face

I then pose the question under a more general form: what is it which passes over your countenance in anger, joy, or fear? All responded that in joy they clap their hands, that in anger they close and they stretch out the fists, that in fear they jump backwards, that is to say that they remember concerning behavior, of acts more or less complex and voluntary, but yet they have no memory of spontaneous contractions of the face.

It is hence very evident, in my judgement at least, that if they are incapable of imitating their spontaneous reactions, it is that they do not see. Without blindness, they would have seen the reactions of others, their own also perhaps, even though one could hardly observe himself in a mirror during the passage of emotions; in any case, they would be in possession of a language of which they are unaware of the first word, and this is not to advance a great deal from the claim, after our experiences, that mimicry is completely of visual origin, that is to say, of social origin.

But this would simplify yet a great deal the question of whether to consider our mimicry as coming out of visual observation that we have made of the spontaneous expressions of others. In fact, we who mimic in conversation and speech so many expressions, have actually observed very few of these expressions, because the spontaneous expressions, I mean the vigorous expressions which would be able to serve as models, are relatively rare in the experience of everyone and, further, the mimicry of children is already well formed before they could possibly have the visual experience with all the expressions that they mimic.

A Language Which Gives Us Mimetic Models

☐ Without doubt, mimicry is a visual imitation of expressions, but this imitation which has come to be in the course of time, and whose origins are confounded with those of humanity, has ended, long ago, in the creation of a collective language of mimicry. It is this language which gives us by sight the mimetic models that we reproduce. The collectivity has accepted the most visible, the most aesthetic schemas, and it has formed them before we propose them. That is the origin of mimicry.

The use of tactile sensations in developing mimicry

. . . To this theoretical conclusion, I believe I can add this practical conclusion: that in the absence of sight, the social source of mimicry, the blind can by the utilization of the tactile sensations, attain here as in other domains the replacement of the visual sensations.

I have known of them in which curiosity is awakened in the course of our conversations who have stated that in placing the back of the hand upon their face, their cheeks rise in laughter and who have trained themselves to make them rise in order to smile.

You have just seen one who from the effect of his education and of his culture has come to take notice of some expressive movements. He arrived at the conclusion himself that the mimicry of fear, given its extreme complexity, remained closed to him. But by the elementary mimicking of the expressions of pleasure his face has become more animated.

Psychological Implications—*Continued from page 189*

vocational training, and, finally, placement. If we recognize that disability produces a psychosocial handicap, we must give greater emphasis to offer those services associated with the treatment phase of rehabilitation. We must discard that cliché "Find a job for that person and most of his problems will be taken care of." The problems may be hidden for a while, but they will emerge later. Treatment must include intensive and effective counseling or therapy, or both, either individually or in groups, as is needed. Only through such efforts can strengths and insights be offered which are necessary to build a positive self-image.

We must continue to build positive social climates so that the debilitating prejudicial attitudes toward the disabled individual are minimized or removed. We must assume greater responsibility in reaching and working with family members, schools, work, and recreational settings and other community agencies apart from our own. We must attempt to provide more opportunities for normal everyday associations between disabled and nondisabled individuals. We must try to arrest and then eliminate the process of becoming multiply handicapped. We must attempt to remove "any disadvantage that renders success more difficult."

Book Review

The following review was prepared by John F. Muldoon, Ph.D., M.P.H., who is director of the Craig House-Technoma Workshop in Pittsburgh, Pennsylvania.

Employment for the Handicapped
by Julietta K. Arthur
Abingdon Press, Nashville, Tenn., 1967
272 pages; $5.95

This book is intended to be a guide about employment for the disabled, for their families and their counselors. It includes information about placement services for the disabled, with special emphasis on the use of state rehabilitation services. It also contains chapters on specific topics, such as "Preparing for Work," "Meeting the Employer Halfway," and "To Tell or Not to Tell: (about your disability)." It does not pretend to be a professional book, but rests its value upon its usefulness to the disabled and their families.

The book does contain specific and useful information about government services and publications, although not more than should be available through state rehabilitation services. While in content it covers the rehabilitation, training, and placement process adequately for a nonprofessional introduction, its manner of presentation and focus may give the newly disabled an unrealistically optimistic impression both of the quantity and the quality of help available and the accomplishments to be made by hand work. It mentions nothing about the variability of quality or rehabilitation services from state to state, the variability in state regulations determining eligibility, and the general quality of the positions that are often offered to the disabled. By simply listing the types of aids available to the disabled, the author may be giving the impression that these are all readily available, without any time lag and in the way that the disabled may want them. Her numerous descriptions of successfully employed handicapped people, while inspiring to the nondisabled, may be misleading to the disabled. The amount of energy and drive that these exemplars possess is probably present in very few persons. Many others do not have the education and intelligence to qualify for the positions available; still others may not have suffered their handicaps at an early enough age or at a time when they had few enough family responsibilities to permit them to be without income long enough to receive training.

The author repeatedly emphasizes what can be accomplished by hard work and cooperation with employers and professional helpers. She seems to imply that lack of success comes from the vices associated with these virtues: disinterest, depression, and feeling sorry for oneself. The shortcomings of the professionals and of the training and employment systems and of the burden the total pattern of the disability itself are overlooked as causes of lack of success in placement. For many severely handicapped persons, this emphasis could cause an increase in their feelings of worthlessness and a loss of some of their interest in trying.

Although the author attempts to speak of all disability groups, the content and her approach show more concern with the adventitiously than with the congenitally disabled, the male rather than the female, the younger rather than the older, the physically disabled rather than the emotionally disabled, the bright disabled rather than the dull disabled, the socially advantaged and upwardly mobile rather than the deprived and socially stagnant. And it is obviously concerned with those who can read rather than with the illiterate.

For workers in the field of the blind, the book does not seem to have much value. Our field is still wrestling with the results of a highly moralistic middle class ethic approach to rehabilitation, and does not need another disciple of this particular gospel. Our preoccupation with our Helen Kellers still remains a major obstacle to providing adequate help to the dull, deprived and disorganized in our midst.

J. F. M.

Readers of *The New Outlook* are reminded that the magazine is not published during the months of July and August. In September, publication will be resumed with an issue devoted to blindness and children.

Report from Washington

On April 11, the House Committee on Ways and Means concluded public hearings on H.R. 5710, the administration bill amending the Social Security Act, and began considering it and other Social Security bills in executive session. A report of House action will be carried in the September *New Outlook.*

In addition to generally endorsing the bill, which provided for increases averaging 15 percent in Social Security cash benefits, medicare coverage for disability insurance beneficiaries, cash benefits for severely disabled widows under age 62, improvements in crippled children's and maternal and child health services, upgrading of minimum public assistance standards, and federal financial support for schools of social work to increase the number of trained social workers, the American Foundation for the Blind suggested further improvements.

AFB recommended that the name of the program under Part II of Title V of the Social Security Act be changed from "Services for Crippled Children" to "Services for Handicapped Children" to more adequately reflect the true scope of the program. AFB also recommended open-end financing similar to that used for the public assistance programs, so that the federal government would have to match all funds the states were willing to devote to these services. AFB also advocated stricter state plan requirements so that children with any type of handicapping or potentially handicapping condition would have to be served by the state agency administering the program.

At present, state crippled children agencies are permitted to serve disability groups they themselves choose despite the fact that they receive substantial federal financial aid for this purpose. As a result, throughout the nation children with potentially blinding eye conditions or with impaired hearing are only receiving minimal services in a program which could prevent severe disability or ameliorate handicapping conditions in all children if it were effectively financed and administered.

In their statements to the Committee on Ways and Means, the American Association of Workers for the Blind, American Council of the Blind, Blinded Veterans Association, and National Federation of the Blind all advocated enactment of H.R. 3064 as well as many of the provisions of the administration bill. H.R. 3064 would enable individuals within the 20/200 definition of blindness to qualify for cash disability insurance benefits with a minimum of six quarters of coverage and without regard to their ability to engage in substantial gainful activity. At present, a person must have 20 out of 40 quarters in employment covered by Social Security and must be unable by reason of a disability which can be expected to last 12 months or longer or result in death to engage in substantial gainful activity. Substantial gainful activity is not defined in the law but is defined administratively as annual earnings between $900 and $1,500 depending on the state vocational rehabilitation agency making the disability determination.

Education

Senator Lister Hill (D–Ala.), chairman of the Senate Committee on Labor and Public Welfare, has introduced S. 1099, a bill which would extend and improve provisions of Public Law 88-164 concerning the construction and staffing of community and university-affiliated mental retardation facilities. The provisions expire June 30. In addition, the bill would extend to June 30, 1972 the authorization of appropriations under Title III of the same law for training teachers and other personnel needed in special education programs for handicapped children, and for research and demonstration projects in these education programs. The bill would also remove the ceiling on appropriations for fiscal years beginning after June 30, 1969.

Title III of Public Law 88-164 was extended to June 30, 1969 with increased authorization of appropriations by Public Law 89-105. The ceiling on appropriations for fiscal 1969 for training of personnel is $37,500,000 and $14,000,000 for research and demonstration projects, including construction of university-affiliated research facilities.

Postal Rates

Rep. Robert Corbett (R–Pa.), ranking minority member of the House Committee on Post Office and Civil Service, has introduced H.R. 7192 a bill which would substantially revise existing postal rates for braille and recorded matter designed for the use of blind persons and for equipment used to produce this material.

The bill extends the free mailing privilege for reading matter, educational aids, special devices, as well as sound reproducers and writing equipment to physically handicapped persons who cannot read conventional printed material. It eliminates the penny a pound rate now in effect for certain types of reading matter and equipment as long as these items are provided for blind and physically handicapped persons free of charge or at cost. The bill also provides that letters in raised characters, sight-saving type, or recorded form may be mailed free by blind or physically handicapped persons. At present, letters mailed by blind persons are at the third class postage rate.

I. P. S.

News in Brief

■ The 32-member executive committee of the World Council for the Welfare of the Blind met in Belgrade, Yugoslavia last April to consider programs and needs of the estimated 15 million blind persons in the world.

The committee received reports from the Council's 13 standing and consultative committees covering such topics as education, employment, prevention, technical appliances, and the deaf-blind. It also made detailed plans for the next world assembly to be held at New Delhi in 1969.

Attending from the United States were Eric T. Boulter, associate director of the American Foundation for Overseas Blind and president of the World Council; M. Robert Barnett, executive director of the American Foundation for the Blind and the American Foundation for Overseas Blind; Peter J. Salmon, administrative vice-president of the Industrial Home for the Blind in Brooklyn; and Miss Marjorie Hooper, editor at the American Printing House for the Blind in Louisville, Kentucky.

■ *Time* magazine has reported that a New York City optometrist, Dr. William Feinbloom, has developed "reading binoculars" that magnify 3.5 times and enable many legally blind persons who are not totally sightless to read with relative ease.

The binoculars, according to *Time*, are telemicroscopes mounted bifocal-style in the lower portion of ordinary prescription glasses. Made up of four lenses (one of them a doublet of two lenses cemented together) separated by three sealed air spaces, the tiny, high-powered units provide magnification and correct aberrations.

■ The U.S. Office of Education has awarded a $2,000,000 grant to Teachers College, Columbia University for construction of a research and demonstration center for education of the handicapped, the nation's first such center in special education.

The projected facility, funded by the grant, will house long-range research programs for five types of handicapped children: the visually impaired, hearing impaired, mentally retarded, emotionally disturbed, and physically handicapped.

Major goals of the center will be identifying characteristics of the handicapped learner and of the learning task, and developing educational methods and materials for improving instruction.

■ The Center for Rate Controlled Recordings is now able to provide, on a limited basis, tape-recorded speech that has been compressed or expanded in time by Fairbanks' sampling method or by the method of reproducing a tape at a different speed than the one used during recording.

The Center is an outcome of the Louisville Conference on Time Compressed Speech convened last fall at the University of Louisville.

Further details may be obtained from Dr. Emerson Foulke, director, Center for Rate Controlled Recordings, University of Louisville, Louisville, Kentucky 40208.

■ The eleventh World Congress of Social Work of the *Union Catholique Internationale De Service Social* will be held in Buenos Aires, Argentina, July 10-16. The theme of the Congress will be Christian responsibilities in human development and social work.

■ A free summer camp program suited to the needs of aged, blind, and handicapped men and women is being offered by the Brooklyn Bureau of Social Service and Children's Aid Society, 285 Schermerhorn Street, Brooklyn, N.Y. 11217. The summer program is under the direction of professionally-trained personnel and runs from June 28 to August 30. It is divided into two-week sessions.

■ A four-week institute for teachers of visually handicapped children will be held at the Illinois State University from June 26 to July 22. Participation in the institute, titled "Teaching Skills of Mobility, Orientation, and Daily Living," will be limited to twenty experienced teachers of blind or partially-seeing children employed to teach those children in the '67-'68 school year.

Institute participants will receive stipends and may purchase university accommodations at $30 per week. Fees and tuition will be waived. Faculty positions for mobility instructors are also available for the institute.

Applications may be secured from Mr. Donald Zahler, Institute Director, Fairchild Hall 114, Illinois State University, Normal, Illinois 61771.

■ A catalogue of optical aids and a supplement of vision testing materials has been issued by the Lighthouse Low Vision Services, The New York Association for the Blind.

The 26-page illustrated catalogue comes in five sections listing hand magnifiers, stand magnifiers, headborne magnifiers, distance aids, and miscellaneous devices. The six-page supplement lists vision tests designed, developed, and clinically tested by the Lighthouse Low Vision Clinic staff.

The catalogue and supplement are available from The Lighthouse, 111 E. 59th Street, New York, N.Y. The price is $2.00.

■ Visually handicapped piano tuners will meet at the Detroit Statler Hilton Hotel on Sunday, July 9th, one day before the opening of this year's National Piano Technicians Guild convention. Throughout the convention, a "drop in" center for blind persons will be open on the hotel's 13th floor.

■ Samuel Mopsik has joined the Program Planning Department of the American Foundation for the Blind as regional consultant for the Middle Atlantic states. He was formerly associated with the Travelers Aid Association of America as director of a special project on agricultural migrants. Mr. Mopsik holds a Master of Social Work degree from the University of Buffalo and is a member of NASW and the Academy Certified Social Workers.

Coming Events

June 25-July 1 American Library Association (Round Table on Library Service to the Blind), San Francisco, Calif.
July 9-12 American Association of Workers for the Blind, Miami Beach, Fla.
July 19-22 American Council of the Blind, Wichita, Kansas
August 1-5 Blinded Veterans' Association, Hartford, Connecticut
August 21-27 International Conference of Educators of Blind Youth, Boston, Massachusetts
August 31-Sept. 5 American Psychological Association, Washington, D.C.
October 1-5 National Rehabilitation Association Annual Conference, Cleveland, Ohio
October 23-27 American Public Health Association, Miami Beach, Fla.

Current Literature

The Blind in Modern Society by Bruno Schultz. *The New Beacon* (Royal National Institute for the Blind, 224 Great Portland Street, London, W1, England), Vol. 51, No. 598, February 1967, p. 34-39. An article based on a lecture given by Professor Schultz at the conference of the Deutscher Blindenverband held in Berlin in November 1965. The author has been professor of economic history at the Berlin Free University since 1955. He lost his sight as a result of an accident during his last years at school.

Painting Blind by Gordon Stent. *The New Beacon* (see above for acquisition information), Vol. 51, No. 598, February 1967, p. 39-41. Mr. Stent painted his first (and last) oil-painting while still having limited sight in one eye. Total blindness made it necessary for him to switch to oil-based crayons. He explains his special technique and the equipment involved.

Mental Retardation and Blindness: A Complex and Relatively Unexplored Dyad by Doug Guess. *Exceptional Children* (The Council for Exceptional Children, National Education Association, 1201 Sixteenth Street, N. W., Washington, D.C. 20036), Vol. 33, No. 7, March 1967, p. 471-479. A review of various aspects of the multiple disability of mental retardation and blindness. The author, a research psychologist at the Kansas Neurological Institute in Topeka, suggests areas of needed research and program development regarding mental retardation and blindness.

Equating Braille Forms of the Sequential Tests of Educational Progress by Donald A. Trismen. *Exceptional Children* (see above for acquisition information), Vol. 33, No. 6, February 1967, p. 419-424. Sequential Tests of Educational Progress (STEP) in the areas of social studies, science and mathematics were adapted and translated into braille. Score conversions were obtained which made it possible to relate scores on the braille forms to existing norms. The equating procedure is described, and some illustrative score relationships are presented and discussed.

Sing No Sad Songs for Me by Gene Stom. *The Christian Home* (201 8th Avenue, South, Nashville, Tenn.), Vol. 26, No. 7, March 1967, p. 39-40. The author, blind himself, asks that the well-meaning sighted not think of a sightess man as a *blind* man, but rather think of him as a *man* who happens to be blind.

Buzz-ball for the Blind by Bernard Kelly. *The Colorado Index* (Colorado School for the Deaf and the Blind, Colorado Springs, Colorado 80903), Vol. 93, No. 1-2-3, Oct.-Nov.-Dec. 1966, p. 5-7. The story of the audio ball developed by the Columbine Chapter of the Telephone Pioneers. Charles Fairbanks, an engineer for Mountain States Telephone in Denver, worked on his own time in his basement workshop to construct a sturdy, usable ball which would give a continuous sound.

Day with Teacher of the Blind Proves 'Eye-Opening' Experience by Barbara Downen. *Perspective* (Illinois Department of Children and Family Services, State Office Building, 401 S. Spring Street, Springfield, Illinois 62706), Vol. 2, No. 4, December 1966, p. 4-7. Barbara Downen, assistant editor of *Perspective* and a newcomer to the Illinois Department of Children and Family Services, decided the best way to learn the tasks and techniques involved in the Community Services for the Visually Handicapped program was to spend a day on the job with one of its staff members. She gives a first person account of her experiences.

M.M.R.

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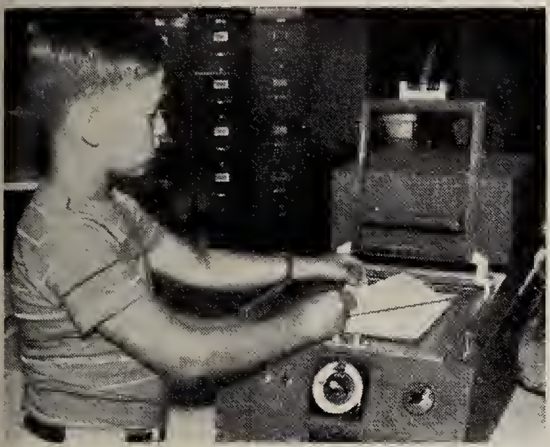

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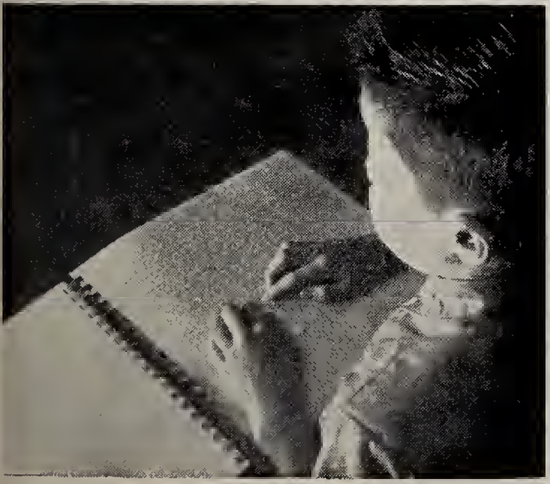

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A New Program for Young Blind Children—
A Cornerstone for Future Service

C rles E. Brown, ACSW, Stanley Briller, ACSW,
S an S. Richards, OTR

C ncept Development of Blind Children

I. weibelson, ED.D., C. Fisher Barg, M.A.

P ventive Child Psychiatry at a Residential School for the Blind

F nk G. Bucknam, M.D.

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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

Assistant Editor
Mary Ellen Mulholland

To Our Readers:

If confession is good for the soul, then we would confess to the long-term and multi-faceted sin of discrimination.

First, we have been discriminatory in using a double-standard for the pricing of AFB publications. Whereas the price for all publications other than the *Outlook* has been based on actual production costs, pricing of the *Outlook* in all its forms—print, braille, and recorded—has reflected utter disregard for production costs. As a result, we have suffered deficits which in the opinion of our trustees are excessively high.

Second, we have unwittingly discriminated against the sighted readers of the *Outlook* by establishing the price of the print edition at a level closer to production cost than applies for either the braille or recorded editions.

Third, we have been discriminatory in our pricing practices as they have affected different segments of our blind readership. We have let the braille reader have his subscription for $1.50 whereas the blind reader of the recorded edition has had to pay $5.00.

Confession is only good for the soul, however, if it is accompanied by positive steps designed for improvement. To achieve such improvement, we have established an entirely new price structure for the *Outlook*, effective with the January 1968 edition. The schedule given below reflects common prices for all versions of the magazine, price levels sufficient to cover production costs, and savings to the reader for two and three year subscriptions as well as bulk subscriptions:

Single subscriptions for one year: $6.00
Single subscriptions for two years: $11.00
Single subscriptions for three years: $16.00
Bulk subscriptions (ten or more): ten percent discount

The bulk rate applies to one, two, and three year subscriptions and permits a mixing of print, braille, and recorded editions. We would urge agencies to take advantage of the bulk subscription rate so as to offer the magazine to board members. It should be noted, however, that a single mailing address must be utilized for a bulk subscription.

Effective with the January issue, the recorded edition will be designed to play back at 8 1/3 RPM, greatly reducing production costs.

Subscription rates currently in effect will not be extended beyond January 1, 1968 to those whose subscriptions expire on or after that date. New subscriptions or renewals received prior to January 1 will be priced at the current rate.

It is generally well known that for about fifteen years AAWB members have received the *Outlook*, by virtue of their membership. This service has been made possible through a special arrangement between the two organizations. While we do not know what effect our new pricing schedule may have on this relationship, we are confident that some plan will be devised to assure uninterrupted service to AAWB members.

The decision to advance prices on the *Outlook* was not made lightly. There are those who will predict a circulation loss, but it is our honest conviction that our field can support a strong professional journal. We will make every effort to keep the *Outlook* just that.

M. Robert Barnett,
Editor-in-Chief

A New Program for Young Blind Children -- A Cornerstone for Future Service

CHARLES E. BROWN, A.C.S.W.
STANLEY BRILLER, A.C.S.W.
SUSAN S. RICHARDS, O.T.R.

Mr. Brown is the executive director of Community Services for the Blind in Seattle, Washington. Mr. Briller is director of professional services for the agency, and Mrs. Richards is leader of the children's group.

Every Tuesday morning the sounds of music, children's voices, adult assurances, laughter, and some screeching can be heard at the Community Services for the Blind in Seattle. These are the sounds of the Children's Corner, a developmental group set up to provide very young blind children and their parents with a more adequate program of service and counsel than had previously been available. The progress the children have made and the satisfactions and security the program has brought to their parents have made it obvious that this is a real and needed service.

The Children's Corner, where social casework, developmental training for the children, and group counseling for the parents are offered simultaneously, grew out of the agency staff's belief that young blind children could and should be gathered together in a small group where they could be helped individually to find play which is satisfying and stimulating to them as developing human beings and where they would get the sensory stimulation they need so much. The staff also felt that if, at the same time, the parents could learn more about their own child and about the normal development of blind children through observation and discussion, much more could be accomplished with the very young than had previously been demonstrated.

Need for program reinforced by Seattle public schools' experiences

The staff's belief that there was a real need for such a program was reinforced by the experiences of the Seattle public schools program for pre-school blind children. This is a most successful program which admits children from the age of three and continues until the child enters first grade or until different educational plans are made. Since inclusion in this program is broad and flexible, the developmental retardation of many of the entering children made it apparent that there was a crying need for a group program for chidren younger than three. For this reason the agency selected children at the two-year level. It was also felt that children younger than two could not participate successfully in a group effort.

Program has six components

To maximize the total developmental and learning experience for each of the children and their families, the program has six components: (1) individual counseling services for each family through the agency's social work staff; (2) growth activities for children themselves with a highly skilled group of volunteers; (3) meetings of the parents who brought the children (mothers usually); (4) the others, (fathers) meeting every other Wednesday evening; (5) periodic "special event" evening sessions for all parents; (6) training for the child in the home—this method is well known and thus not discussed here.

Children's group carefully planned

The group was carefully planned. All two-year-old children whom the agency knew were evaluated as to availability and development: how well they were walking, drinking from a cup or bottle, toilet training, etc. Full interest and participation of both parents in each case was an absolute requirement. A group composed of five children was chosen because this seemed to be the maximum number one person could adequately supervise, while even with allowances for absences, it would be workable. (In the eight months only one session had one child, average attendance has been three or four.) During the year seven families were served since two dropped out and two others entered.

Children's visual problems

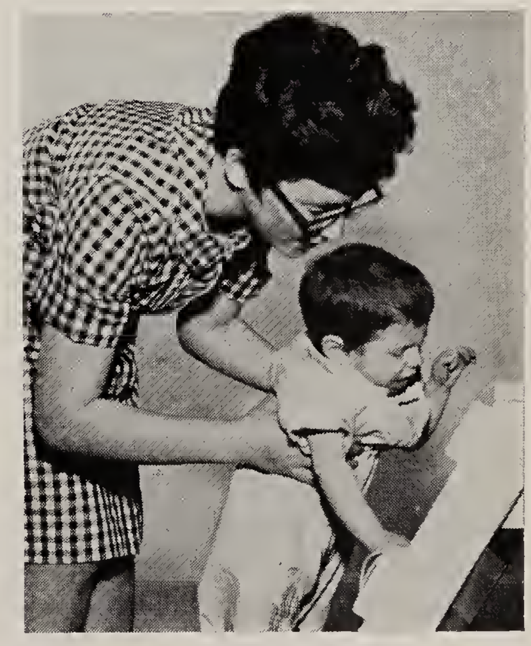
The children selected had various types of severe visual problems. However, concern was not so much with the visual acuity as with stimulating the children to make full use of the residual vision they possessed. Good medical and ophthalmological information was available on all five children. Two children had only light perception. Another child had detached retinas but surgery had provided enough vision so the child could move about freely. The fourth child had a defective optic nerve and progressively lost more vision in the months the group was in session. The fifth child had retrolental fibroplasia but with remaining light perception.

All the children had both parents living and came from unbroken homes. Socio-economically these were strong middle class families of considerable stability and with few family problems. Four were only children. During the year, babies arrived in two of these families. Two children who entered the group later in the year were from larger families.

The Children Who Participated

☐ The child who attended most regularly missed coming only because of one cold and a hospitalization. At first unhappy when his mother left him, he responded quickly to the male volunteer and was soon moving about so freely that it was hard to believe he was almost totally blind. Although there was some regression after his hospitalization and, perhaps, because a baby sister arrived at about the same time, he recovered rapidly and should adjust easily to the pre-school program.

Frequent hospitalizations had stymied the development of one little girl who was not yet able to sit up alone and had difficulty in holding up her head. By the end of the program she was standing when she could hold on to something, responding definitely to music, and was interested in toys given to her though she would not seek them out on her own initiative.



Intermittent attendance and the illness of her mother kept another little girl from functioning well in the group, although her parents seem to have benefitted from their group sessions. However, she had more vision than the other children and was able to run around rather freely, especially after she began to attend regularly.

One little girl was happy, and walked easily, often on her toes, swaying to music and keeping time well until her mother went to work. During this two-month period she was unhappy and fussy and seemed to lose some freedom of mobility, either through regression or loss of vision (she began to bump into furniture). She began to walk with her feet flat on the ground and could not stand confusion. However, individual attention, social casework, and the helping process of the mother's group have gradually given her more security.

The fifth child, a two-year-old girl, was not yet walking when she entered the group but would stand at the table with the lamp (she had some light perception) and would go over small objects carefully. In a short while she began to move by crawling to a wall and then walking along the wall very carefully feeling her way. Although she would not walk with the help of a volunteer, she began to walk around chairs and along walls as she became more at home and more mobile. One morning her mother brought her in, saying she had begun to walk at home alone. We knew she would soon be walking in the group since her pattern was to do things at home first and later in the group.

Play Equipment Used

☐ Selection and acquisition of play equipment was simple and easy. In the main, it was furnished by four service guilds who work for the agency, but some equipment was also contributed by the parents. The equipment was selected to provide various sensory experiences and stimulation. There are a number of child size chairs and two tables to match. On one table is a lamp for the children with light perception to look at and to play under. There is a record player. Most of the quiet play is on the floor where there are a number of small rugs of different textures and thicknesses, large pieces of corrugated paper, blocks of cement with various kinds of stone imbedded in them, a log of wood, and from time to time other interesting objects. The children are usually barefoot during the group session and use their feet as well as their hands for exploring. Among the other items are two child size rockers, two adult rockers, a saw horse climber, a rocking boat, a jumper horse, a sandbox, an audio ball, and a tub for water. The small toys are all reality objects of different sizes, textures, weights, and sounds. Nuts, fishing weights, bean bags, sandpaper, all kinds of paper, cellophane, baskets of different textures to hold the small toys, tin cans which fit together, and kitchen utensils are also used. The supply grows and changes as the weeks go by since new materials are frequently brought in. Squeaky toys are much used as are almost any kind of thing which makes a noise such as bells, or toy telephones. Few smooth plastic objects are used since they have little sensory value. As the children develop in mobility, more moving toys, such as a small tricycle and a car which moves around, are used. As the children grow, they explore objects less and begin to run around into all the rooms available, tapping, climbing, and listening to the sounds reverberating about them. Venetian blinds, draperies, and the air currents from machinery are of great interest.

Music used frequently

Rhythmic music is played frequently and the children move spontaneously. Few children's records are used except the ones with animal sounds and songs. Sousa's marches, waltzes, and polka music are also used. The dance music from the movie, *Zorba the Greek*, was almost magical in making the children want to move. If there is a singing record, the adults sing along and the children often come in on it as they keep time to the music or dance their own little dances. There is a sturdy drum which can be used by either adult or child.

Program Plan

☐ At first, each child had to be assisted individually which required one volunteer for each child. Although this was not always possible, there was enough help so that no child was left alone to fall into bored reiterative play or blindisms. Later, as the children became more mobile, the one-to-one relationship was not as important and one person could keep in touch with more than one child.

The personnel actively engaged in this project are not teachers in any "professional" sense of the term, but lead the child in discovering the world around him by guiding him in his zest to find objects and in learning to walk, climb, and jump freely. The activities must be stimulating throughout the whole play period. If a child becomes tired, he is held on someone's lap in a rocking chair and given an opportunity to relax, very often with his bottle. The purpose of the activity is to help the child learn about his own abilities and his environment through playing with reality objects and through rhythmic expression. Fortunately and importantly, we were able to recruit happy and enthusiastic volunteers who enjoy playing with and observing the children.

No set program—children worked with individually

There is no set routine or special time to do certain things since each child is worked with individually. There is a time for music and dancing soon after the children have arrived and feel oriented and happy. Cookies and milk are available in mid-morning. Occasionally the children are brought together to do something special. They may gather around the piano or around a tub of water, or two will rock in the big rocker or rocking boat together. They need to find out that the other children are not "things." Most of the contact between the children, however, is accidental and quite normally involves pushing or pulling and sometimes feeling with fingers. The children are never "disciplined." If a child does something unsafe or hurts another child, we tell him what has happened and change his activity. When a child achieves in some way with a new word, or friendly social act, the positive reinforcement of praise is used.

Mothers did not remain with their children when they brought them in but went directly into their own group. The children were told and sometimes shown where their mothers were and eventually knew each session that their mothers would return. No child cried for long unless for some reason he felt insecure and unhappy. Also, mothers could be easily called if the crying of any particular child persisted.

The children's actions in the sessions clearly reflect any tensions in the home. Through discussions, the mothers were helped to understand the child's distress and how to deal with his anxiety.

Personnel

The group leader

☐ The first concern in staffing the project was to obtain the services of a person who could function well in three ways: (1) as director of the actual work with the children and developer of creative play situations by grouping the children in terms of specific activity and play equipment; (2) as leader and director of the volunteers in the direct play with the children; (3) who could, through alertness to the problems of blind children offer advice as to how the staff, the volunteers, and the parents could best help each child. This last ability is of prime importance since the total effort is based on the individual needs and accomplishments of each child and of a healthy climate for him in his own family. The agency was most fortunate in obtaining the services of an occupational therapist who had specific experience in developmental work with young children of special needs.

Coordinator

It was realized that someone from the social work discipline should have responsibility for overall coordination of the total activity including individual counseling services, direction of the children's activities, coordination and development of the parents' group sessions. Since assigning a social worker from staff was not feasible and since there was a strong conviction that many staff members should be involved in the total project, the director of professional services of the agency's social work staff was appointed project coordinator and led most of the parents' group counseling sessions. All staff members were directly involved from time to time in observation and discussion of the children's activities, in the staff discussion following each session, and in the parents' groups and other related activities. The staff involved included caseworkers, the executive director, and group and recreation workers. An important contribution was made by the agency specialist in orientation and mobility.

Guest consultants

Other persons, including a psychologist, a speech and hearing therapist, the school social worker, a school administrator in special education, and specialists in recreation for the handicapped, were invited to meet with the parents' groups from time to time and to observe the children's group and offer suggestions.

The services of other persons were also utilized, particularly with the parents' groups. One was a blind boy who is a university senior. The grandmother of one child talked with the mothers on discipline, training, and the role of other family members in child development.

The Volunteers

☐ An important factor in the success of this effort was the caliber of the volunteers who worked with the children. The key to the success of the volunteers and of their services is to be found in the auspices, coordination, training, and supervision given to them. Criteria for selection included availability for training and participation on a regular weekly basis from October through June. An interest in young children, minimal anxieties about working with blind children, and an ability to function independently while taking direction from a leader are necessary. The volunteers must have flexibility and sensitivity, patience, tolerance and warmth, and an understanding of their role. The volunteer must be natural, able to take constructive criticism and, above all, have a clear understanding of the purpose of the group and the project goal.

Selection

It was believed that a male volunteer was important. A young bachelor was found who was employed nights and thus was available mornings. He possessed an unusual sensitivity for young children and contributed the balance that the women volunteers needed. The children made good use of this man. Two grandmotherly women were also a valuable addition.

A single corps auspice

The basic corps of the volunteer group came from the membership of the Seattle Section of the National Council of Jewish Women. This group appointed a chairman for this particular service and recruited from its membership. The chairman appointed assumed responsibility for the presence of volunteers to provide adequate coverage. There was much value in this arrangement, because it relieved the staff of the responsibility of recruiting the volunteers and because the volunteers carried their enthusiasm into the community at large.

Training of volunteers

In addition to an initial personal interview, the volunteer training program consisted of five units of discussion in two sessions of two hours each supplemented by required outside reading. Supplementary reading was also offered each volunteer in terms of individual interests and the problems the children presented to them. Orientation to casework counseling with parents, and sensory deprivation and sensory input as it related to orientation and mobility were also a part of the training.

Group summary and critique sessions

Sessions helpful to both volunteers and staff

After each session with the children, the volunteers would meet with the group leader and various staff members to review the progress of each child and the interaction of the volunteer with the child. These half-hour sessions for review and critique served as ongoing training for the volunteers and were also of much help to the entire agency staff in the development of the project and in individual work with each family. These discussions sharpened the judgment and sensitivity of the volunteer and were accomplished in an atmosphere of free discussion. Though two volunteers were given additional special training in note taking, all were encouraged to share the note taking responsibility wherein observations of each child's activities were recorded. This widened the volunteer's own powers of observation and disciplined the volunteers' reactions to the child's behavior.

These critique sessions began with the reading of the notes taken in that day's session interspersed with impromptu comments and discussion of a child's behavior or volunteer's action. Behavior was discussed as to what it meant in the particular child's situation and in child development generally. The social worker who had led the parents' discussion group that day would report any information the parents had given about the child, or any pertinent information about the family. Ongoing medical and other social information was also provided each week by the social worker for the particular family. These summary and critique sessions were also used to train volunteers about the type of play equipment that would be most helpful to a specific child and how to use it with the child. Confidentiality was expected of the volunteers in terms of all information on the children, their parents, and other family members. The final review, critique, and evaluation session in June dealt with the volunteer's role in and contribution to the total project.

Parents' Participation

Mothers

☐ The weekly morning parents' discussion group met informally for an hour and a half leaving members with about a half hour at the end to talk among themselves. These weekly meetings dealt with the day-by-day problems each parent was experiencing with his child, the frustrations in understanding how to help the child, and in sharing helpful information with other parents present. These sessions have been, by and large, informational, with much help given by the staff member leading the group. A familiarization process occurred among the members and soon they were able to speak more frankly and easily to each other about their problems with their own child. Some of the earlier sessions seemed superficial and not related to the purpose of the meeting, but this too was part of the familiarization process and staff permitted it to happen. Real emotional and attitudinal interaction occurred rarely but the mothers did become friends and met informally in each other's homes where real interaction may have occurred. The leader of the children's group participated in the parents' discussion concerning specific problems she saw in each child. The mothers also participated in a visit to the public school program for blind children, helped plan parties and outings for the children, and shared key magazine and other articles concerning progress and accomplishments of blind youngsters.

Fathers

The parents who could not participate in the weekly morning sessions met every other Wednesday evening. These were principally the fathers. Sometimes all parents were together for a special discussion led by an outside visitor. The fathers, when alone, discussed providing assistance to the project by making toys and also how to assist their children in development, both present and future. They learned about the agency and its services, and most particularly about blindness and the total constellation of services available to all blind children and adults.

Fathers' group one of weaker links

This was one of the weaker links in the total project experience. Attendance was only fair because it was impossible to select an evening completely satisfactory to all, and because of apathy. Since no one staff member was assigned to this evening group, these problems could not be dealt with satisfactorily by the several staff members who took turns leading the group. The group did not seem able to follow through on any project or plans to enhance their role in the total program nor did the fathers share their feelings and attitudes about their children.

Conclusions

☐ The staff believes that the objectives of this program have been achieved. The children have grown and changed dramatically. We believe it establishes the value of a planned session devoted entirely to individualized developmental training. Three of these youngsters are ready to participate fully in the more structured program of the public school. Two children need continued individualized treatment.

Homogeneity in the group is not essential since the program must be geared to the potential of the individual child. Having children in different stages of physical development can be helpful to both the parents and volunteers in understanding the goals of treatment.

Through group discussion coupled with individualized counseling services, the parents grew in assurance, comfort, and knowledge that enabled them to relax attitudinally, to be more accepting, and therefore to be more positive in their help to their children. The main success of the program lies in the involvement of both parents as well as in the direct and consistent training provided each child. The availability of social casework services to each family at the same time has been a definite asset.

Continuation of three types of parents' discussion groups seems merited since it is unreal to expect both parents to come one morning each week. There also appears to be additional merit in periodic sessions where all parents are together. However, as was indicated with the father's group, each group function should be the responsibility of the same member of the social work staff throughout the year's program.

The full interdisciplinary approach with the involvement of each staff person of the agency (social casework, group work, recreation, orientation and mobility) has also been of help. More outside consultant services should be employed in the course of the year's service.

Carefully chosen and trained volunteers have been of much value. It was of particular help to have the corps of volunteers mainly from one service group and through that group discipline to have assurance of a high degree of attendance and commitment to the project.

A variety of adults provided the children with the diverse stimulation basic to rich growth.

More aspects of the problems of each child are exposed in the group situation, allowing members a greater opportunity to deal with the problems.

The actual demonstration of the children engaged in activities with the volunteers is a profound support to the parents.

Group counseling is an added method of reaching the parents and is particularly effective for those parents who cannot profit from individual counseling.

Summary

☐ Altogether, the needs of the child must be met along the way as effectively as possible—the need for help with initial developmental growth, and later educational needs, social needs, and vocational needs when he starts to grow up. Threading through all of these needs is the vital need for an effective means of communication, based upon an adequate understanding of language.

Note: Copies of the appendices to this study, A Training Course for Volunteers, and an Outline for Observation and Note Taking on Child Development Group, may be obtained from Charles E. Brown, executive director, Community Services for the Blind, Seattle, Washington.

Dr. Peter J. Salmon Honored

■ Dr. Peter J. Salmon, administrative vice-president of the Industrial Home for the Blind in Brooklyn, New York, was honored by the board of trustees for his fifty years of uninterrupted service with the organization at a testimonial dinner June 1. Dr. Salmon, who is particularly noted for his work with the deaf-blind, joined the Industrial Home for the Blind in 1917 as business manager, and served the organization subsequently as a member and secretary of the board of trustees. In 1945 he resigned the latter posts in order to become executive director, a position he held until January 1966 when he became administrative vice-president.

Dr. Salmon is a past president of the American Association of Workers for the Blind, the New York State Federation of Workers for the Blind, and the Greater New York Council of Agencies for the Blind. He is a trustee of the American Foundation for the Blind, trustee and secretary of the American Foundation for Overseas Blind, and a member of the Corporation of the Perkins School for the Blind—from which he graduated.

Concept Development of Blind Children

I. ZWEIBELSON, Ed.D.

Dr. Zweibelson is a senior psychologist for the New Rochelle, New York School District.

C. FISHER BARG, M.A.

Mrs. Barg is a school psychologist for the Elmont, Long Island public school system.

According to Carroll (1964), a child must possess the capacity to recognize, identify, discriminate, and manipulate the features and processes of the world around him in order to learn language. Although Carroll did not specify the sense modality or modalities through which the child learns gradually to identify and discriminate the world around him, it appears that, in the learning of language, the early-blinded or congenitally blind child must differentiate his environment gradually by means of his auditory and tactile modalities in particular.

One difficulty in language development for the blind child seems to be with word cognition. For the blind child, there is confusion between the spoken word and the meaning of the word as it relates to phenomenological experiences. One must consider that language is manufactured by sighted people and that the blind child's means of conceptualizing and perceiving reality are different than those of the sighted. It can therefore be expected that the methods used in learning language or the sequences of language development of blind and sighted children will be different.

It was the present researchers' purpose to investigate essentially one aspect of language development in the blind child, that of concept development. More specifically, the investigators sought to find differences between levels of concept formation in blind and sighted children.

Certain studies have indicated that, by the onset of puberty, the abstract level of concept formation should have been attained in sighted children (Gesell and Ilg, 1956; Piaget, 1942; Reichard, Schneider and Rapaport, 1944). There have been no studies to explain the blind child's attainment of different conceptual levels.

It was hypothesized by the investigators that the eight sighted children studied would make more abstract responses compared with the blind; the blind would be expected to produce more concrete and functional responses. The three levels of concept development described below were used in the analysis of word meanings for both the blind and sighted children:

1. the term *concrete level of concept formation* is used where a specific characteristic of the object in question is considered to be the content;
2. the *functional level of concept formation* stipulates the function the object performs, or what one does with it;
3. the *abstract level* refers to the general term connoting or summing up all the essential common characteristics of the object.

Subjects Who Were Selected

☐ Two groups of subjects were selected—one blind, the other sighted—to determine differences in levels of concept formation. The various criteria used to match the two groups limited the number of children which could be chosen to meet the requirements. Thus, there were eight subjects between the ages of eleven and thirteen in each group.

Subjects who made up the blind group

The blind group consisted of those children who had become blind before the age of three. Three of the children had only visual light perception. Five of the children were totally blind. Of the eight subjects, two were blinded within the first three years of their lives; the other children had been blind since birth. Retrolental fibroplasia was the cause of blindness for five of the children; the exact cause of blindness for the other three children was not known.

Subjects who made up the sighted group

A group of eight sighted children were selected who had backgrounds and characteristics similar to the blind group. All of the children were enrolled in public schools and had sufficient vision to function efficiently in regular class, with or without the use of corrective lenses.

Each of the blind subjects was matched with a sighted child in terms of the following factors: sex; chronological age; intelligence; socioeconomic level of parents, and lack of emotional and organic involvement. Five girls and three boys were included in each of the two groups. Sex was equated to rule out the possibility of differences in conceptual performance being attributed to this factor. Similarly, chronological age, within a six-month range, was matched. Intelligence was equated based on the verbal intelligence score received on the Wechsler Intelligence Scale for Children classification indicated by the Wechsler manual (1949). Two pairs of subjects fell in the dull normal range; four pairs were within the average range, and one each in the bright normal and superior categories. The Lloyd Warner (1940) occupational classification was used to determine the socioeconomic status of each subject's family. To rule out the effects of emotional and organic factors on test performance, no subject with a serious disturbance was included. A sighted child was considered free of emotional and organic involvement if he was enrolled in a public school and had not been referred for outside psychological treatment. The psychological evaluation on record at the special agency that serviced the blind child was used to determine the emotional and physical status of the blind subjects.

The Procedure

☐ WISC test protocols for the blind sample were obtained from an agency servicing the blind. Test protocols were available for five of the children in the sighted sample; one investigator administered the test to three additional sighted children.

For each subject, every response made to the words in the similarities and vocabulary (only nouns were used) subtests was rated on the basis of whether it was a concrete, functional, or abstract definition. One point was scored for a concrete response; two points were scored for a functional response, and three points were scored for an abstract response. The sum of responses for each of the conceptual levels was then determined and percentages were computed for each level.

The percentages of responses obtained for the three conceptual levels for each of the subjects are presented in Table 1. The words in the similarities and vocabulary subtests were used with all but four of the subjects for whom only the similarities subtest was available.

TABLE 1

Percentages of Response* Obtained at the Concrete, Functional and Abstract Levels for Matched Groups

	Percentages of Responses						
	Blind Group (N = 8)				*Sighted Group (N = 8)*		
Subj.	*Concrete*	*Functional*	*Abstract*	*Subj.*	*Concrete*	*Functional*	*Abstract*
1**	0	14.3	35.7	1**	28.6	0	71.4
2**	14.3	14.3	71.4	2**	0	16.7	83.3
3	23.8	42.9	33.3	3	27.8	33.3	38.9
4	40.0	30.0	30.0	4	14.3	33.3	52.4
5	33.3	6.7	30.0	5	15.8	10.5	73.7
6	61.5	30.8	7.7	6	31.6	52.6	15.8
7	18.2	31.8	50.0	7	25.0	8.3	66.7
8	27.8	38.9	33.3	8	34.8	30.4	34.8

* Responses obtained on the Vocabulary and Similarities subtests.
** Similarities subtest responses were used exclusively.

A nonparametric test was used to analyze the data because of the small number of subjects and the heterogeneous nature of the sample. The randomization test for matched pairs was selected inasmuch as it could be used to obtain the exact probability under the null hypothesis associated with the occurrence of the observed data, without making any assumptions about normality or homogeneity of variance (Siegel, 1956). This test could be used to test the null hypothesis that the sum of differences between the matched pairs on the abstract conceptual level was equal. The investigator predicted that the sighted children would utilize abstract concepts to a greater extent than do the blind children.

The Results

☐ The level of significance accepted by the researchers was .05 where N was equal to the number of pairs, which was eight. The sampling distribution consisted of the permutation of the signs of the differences to include all possible (2^N) occurrences in the sum of the differences. In this case, $2^N = 2^8 = 256$. A one-tailed test was used and the region of rejection consisted of those twelve outcomes which had the most extreme sum of differences. The results of the randomization test are shown in Table 2. As shown in Table 2, the sum of the differences, or d_i, was equal to 65.6. Table 3 shows the twelve possible outcomes of the most extreme positive sums of differences. Outcome twelve (marked with an asterisk) was less than the outcome that was actually observed. Thus, the difference between the matched pairs was significant at the .05 level, permitting rejection of the null hypothesis that there is no difference.

Discussion and conclusion

The prediction that blind children, aged eleven to thirteen, in comparison with sighted children of similar age, sex, intelligence, and socio-economic level would not use abstract concepts to the extent of children with normal vision was supported by the results reported above. In contrast to sighted subjects, the blind subjects functioned primarily on a concrete and functional conceptual level. These findings agreed with the observational studies of Nagara

TABLE 2

Difference Scores Obtained from Randomization Test for Eight Matched Pairs of Subjects

	PAIRED SUBJECTS							
	Pair 1	*Pair 2*	*Pair 3*	*Pair 4*	*Pair 5*	*Pair 6*	*Pair 7*	*Pair 8*
DIFFERENCE SCORE (d)	—14.3	11.9	5.6	22.4	13.7	8.1	16.7	1.5
$\Sigma d_i = 65.6$								

TABLE 3

The Twelve ** Most Extreme Possible Positive Outcomes for the d's Shown in Table 2 for Eight Matched Subjects

No. of Outcome	*Values For 8 Matched Subjects* *SUBJECTS*								
	1	2	3	4	5	6	7	8	d_i (*Total*)
(1)	14.3	11.9	5.6	22.4	13.7	8.1	16.7	1.5	94.2
(2)	14.3	11.9	5.6	22.4	13.7	8.1	16.7	—1.5	91.2
(3)	14.3	11.9	—5.6	22.4	13.7	8.1	16.7	1.5	83.0
(4)	14.3	11.9	—5.6	22.4	13.7	—8.1	16.7	—1.5	80.0
(5)	14.3	11.9	5.6	22.4	13.7	—8.1	16.7	1.5	78.0
(6)	14.3	11.9	5.6	22.4	13.7	8.1	16.7	—1.5	75.0
(7)	14.3	—11.9	5.6	22.4	13.7	8.1	16.7	1.5	70.0
(8)	14.3	11.9	5.6	22.4	—13.7	8.1	16.7	1.5	66.8
(9)	14.3	11.9	—5.6	22.4	13.7	—8.1	16.7	1.5	66.8
(10)	—14.3	11.9	5.6	22.4	13.7	8.1	16.7	1.5	65.6
(11)	14.3	11.9	—5.6	22.4	13.7	—8.1	16.7	—1.5	63.8
(12)	14.3	11.9	5.6	22.4	13.7	8.1	—16.7	1.5	60.8

** These constitute the one-tailed rejection region for the randomization test when PL. 05.

and Colonna (1965) and Maxfield (Pintner, Eisinson, and Stanton, 1941), as well as Rubin's (1964) empirical investigation. However, none of these investigations used children of the same age as those in the present study.

The present results supported Omwake and Solnit (1961) and Carroll (1964) who have called attention to the restrictions imposed on sensory experience by blindness. Recognition and differentiation of the environment are limited by the loss of sight. The capacity to organize and store mental representations is impeded, thus affecting secondary process thinking. Axelrod (1959), in agreement with Omwake and Solnit's hypothesis, found that auditory and tactile tasks which were abstract in nature posed greater difficulty for early-blinded children than sighted ones. Similarly, Hayes' findings (1941, 1956) that blind children tended to obtain lower scores than sighted children on reasoning tasks, and Rubin's findings (1964) that deficiencies in concept formation in the congenitally blind persisted into adulthood, agree with the present results.

Vygotsky's contention that prior to concept development in the sighted child ". . . the child's and the adult's words coincide in their referents but not in their meanings" (1962, p. 73) seems to be reversed in the language development of the blind child. Communication seems to be possible because meanings, in terms of physical events which he has experienced, are similar, whereas referents require more refined discrimination. Thus, in order that verbal concepts develop, the child must be given ample opportunity to explore and manipulate his surroundings. It is generally agreed that the mother provides the blind infant with the initial experience on which to base concept development.

Education Must Be Geared to Needs and Development

☐ Education of the blind child must be geared to his needs and level of development. Effective teaching includes supplying the pupil with concrete experiences—both with objects and situations. A multi-sensory approach to learning as well as increased training in reasoning tasks in the early school years would perhaps be beneficial to the blind child. Inasmuch as, at present, the trend is to integrate the blind child into the regular school setting, it becomes especially important to consider his deficiencies in abstract concept formation as compared with his sighted classmates. The blind child must be approached and understood on a level commensurate with his stage of concept attainment in order to effect meaningful communication.

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Touch and Learn

ELISABETH D. FREUND

Mrs. Freund is curator of the Touch and Learn Museum at the Overbrook School for the Blind in Philadelphia, Pennsylvania.

Some years ago I visited a second grade class at Overbrook School for the Blind in Philadelphia. The children, giggling and laughing, read a funny story about a little mouse, but when asked to show between their fingers how big a mouse was, they indicated sizes from half an inch to several feet. This experience led to the beginning of the Touch and Learn Center at Overbrook where we now have hundreds of objects and models which our students can see and study with their fingers.

Inception and Organization of the Center

☐ After we gave lectures about our collection at recent conventions, a number of schools considered whether they should create similar exhibits. We received many inquiries about how the Touch and Learn Center was brought together and how we store, file, and show our items.

Financing

The financial question turned up almost immediately. The federal government, through the states, makes funds available under Title I of ESEA. Of course, there are certain overhead expenses: the salary for a curator, and expenditures for some equipment, tools, and material. But apart from these a collection won't cost much because as most of the items are not made to be sold, you must try to get them donated, or make them yourself. So far, we have spent between $700 and $800 on a collection which fills two big halls. Among our major expenses were a model of the human body ($450) and some physiological models (e.g., ear, eye) for about $50 each which we had to buy from a scientific school supply house, while the University of Pennsylvania donated a human skeleton we asked for. (There is a rumor among our younger students that we personally killed the poor man for our sinister purposes,—please don't believe it.)

Value of publicity

Fortunately, many of our exhibits were free for the asking. The words "Overbrook School for the Blind" worked like magic. We visited all nearby museums and asked for items they could spare. We sent press releases to newspapers, and asked for interviews about our new project on radio and television stations. Since this was the kind of news they like, we got a lot of publicity from them. Usually, immediately after such publicity, phone calls came from clubs, scout groups, schools, or just friendly people, offering things which might be useful—mounted animals, household gadgets, ship models, weapons, and even a full-sized suit of armor with sword and shield. This last donation was an extraordinary case of good luck but I am convinced that other schools will have lots of good luck too.

Of course, it takes time to get a large and diversified collection together. First of all, you have to decide what you want, and, just as important, what you don't want. Then you must hunt for the right source and persuade people to let you have their treasures. But don't go begging. Tell them what you need and ask for advice. They will make your problems their own. People want to help.

Some good sources

The classified pages of the telephone book proved to be a wonderful tool. When special objects were needed—such as gears and sprockets, a model of a tepee, or exhibits about shoe or felt hat manufacturing—a telephone call or letter to manufacturers or dealers usually brought the right results. We received exhibits about aluminum, asbestos, cork, gelatine, wool blankets, pencils, electric bulbs, telephone cables, iron and steel, coal and coke, fibers and fabrics, papermaking, and newspaper printing, among others. Industrial firms and airlines sent models of planes, helicopters, and dirigibles.

High school science fairs

High school science fairs in which sighted students compete are also a good source. In Philadelphia, there is even a classical contest dealing with Egyptian, Roman and Greek culture, under the auspices of the University Museum. With the permission of the fair supervisors, we have asked exhibiting students to donate models we could use. Not only the students, but their parents, principals, and schools felt honored by our requests. One school liked the idea so much that next year it will be the project of the school to make models just for us. Thus both our schools will benefit: their students will work with the good feeling of helping others less fortunate than themselves, and our collection will thrive. But we will have to write even more thank-you letters than before.

Of course, many of the fair models are made to be seen only, and others are not built sturdily enough for the many hundred fingers which might explore them. But very often models can be improved and adapted. Light signals can be changed into bells or buzzers, flimsy paper structures can be replaced by wooden ones, and details can be made feelable by covering surfaces with differently textured materials. All models have to be brailled. On an adapted model of a volcano which opens to show the inner structure, our students now can feel the various strata, the vent through which magma is emitted, and the layers of ash and lava (corrugated cardboard, sandpaper, fabrics, and oilcloth have been used). A key in braille and enlarged print gives the information.

It is amazing how many items we have for the classical periods: an Egyptian gate; the Pyramids of Gizeh; a fourteen-inch long sphinx; Roman and Greek temples; a Greek amphitheater; a Greek gymnasium; Caesar's bridge; a Roman aqueduct; a Roman soldiers' camp; chariots, tables of Roman numerals, etc.

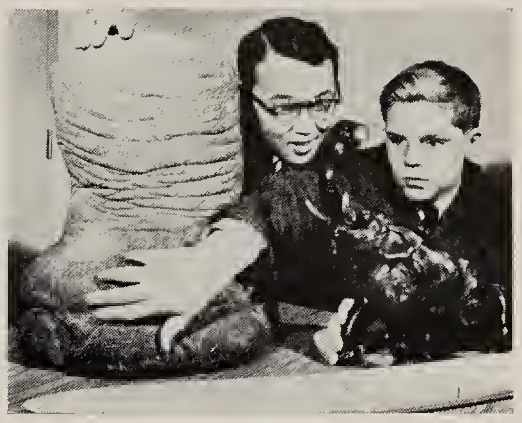
Among our models dealing with science are levers, windlasses, pulleys, pendulums, electric motors and magnets, sound exhibits, and earth faulting. We have a genuine six-cylinder gasoline engine (with cutaway cylinders in which the pistons can be felt while moving up and down), cutaway batteries, differential gears, crank shafts, and transmissions. Cutaway models are especially recommended.

Models which have been electrically wired are very useful. We have a map of the United States on which the individual states are outlined with feelable tape. In the middle of each state is a metal screw. Similar screws are beside a list of all the state capitals in alphabetical order. If the screws of a state and its capital are touched by two sounders, a buzzer will ring as proof that the student knows his geography.

We also have a zoo of mounted animals, and a large collection of early American household utensils. Children in elementary grades read about the lives of the first settlers—now they can handle implements, turn a butter churn, coffee grinder, or spinning wheel, feel butter molds, pump water at a real kitchen sink pump, and explore covered wagon and stagecoach models.

Many items can be made

Of course, one can't hope to get everything from other people. You have to make many things yourself. If possible the right material should be used for construction: genuine wood for a log cabin, with real chalk for the chinking. And don't forget extra logs, notched at the ends, to show how they stay together. One important goal is to make the students visualize the actual size of something which can be presented by a small model only. Fortunately, we have a cured elephant foot and a tusk to show with a small model of the whole animal. And our exhibit about whaling has an enormous vertebra of a whale which can be compared with the small vertebra of a horse. On our Washington Monument (a simple cardboard model covered with sandpaper), small nails at the base indicate persons in the same scale and, thus, when eyes or fingers follow the distance from the base to the top of the Monument, they will get the right impression of its giant size.



House models have removable roofs so that a student can have a good look inside at beam structure, lofts, and chimneys. Half of an Eskimo igloo dome can be removed so one can look at the wooden platform, covered with genuine sealskin on which the Eskimos live. We made the igloo from styrofoam blocks shaped over an upside-down salad bowl.

Solar system

Most homemade models can be constructed at low cost. We built a model of the solar system on a six-foot iron rod (scale 20,000 miles to one inch for diameters and ninety-three million miles to one inch for distances). The sun is a cardboard disc of forty-three inches. The planets (toy balls and beads of different sizes) were bought for $1.65. We did some arithmetic so that we could tell the students that the little bead representing the Earth would be placed more than two street blocks away, had we used the same scale for both diameters and distances. To put Pluto in its right place we would have to ride the bus that passes the school far away to its terminal. In addition to this model we made a smaller one on which the planets turn around the sun on a lazy susan—at almost no cost at all, since the turntable and the ball for the sun were given to us and the bead-planets were glued to wire arms made from coat hangers.

A little imagination goes a long way

A little imagination helps a lot. We received a gold-washing pan but, strangely enough, the donor forgot to let us have some gold nuggets! So we had to make fake nuggets from lead. By rotating the pan, we can separate the nuggets from sand, even without using water.

How objects are kept

We began our Touch and Learn Center in a medium-sized classroom. We now occupy the entire space of the former library. Around the walls are open bookshelves which we number. If possible, we keep our things in cardboard boxes where they are protected against dust and moths. We label the boxes and give them a stack number. Items which don't fit into boxes are kept under plastic covers made by us for each object. The covers, too, are labeled.

Cataloging

Two catalogs help us keep order. In one, the object is listed alphabetically by its name; in the other, it is listed under subject categories. It is easy to see from the first file that we have an old pistol in stack twenty-four and an old rifle in stack forty-two. Both also appear under the categories "Arms and Weapons" and "Revolutionary War."

Classroom use of objects

No matter how large a collection is or how neatly it is catalogued, it is only as good as the amount of use it gets. We send objects to classrooms on special occasions—the woodchuck on Ground Hog Day or a wild turkey before Thanksgiving. At this writing, we are preparing our students for the National Aeronautics and Space Administration exhibit by showing them the objects we have about the "Conquest of Space." Teachers are expected to borrow material for their classes. In these instances, we often provide information cards in type and braille giving details or statistics about the objects under consideration. Teachers may request a specific exhibit in our rooms, or we make up an exhibition and invite the teachers to bring their classes for a lecture. Most important, there is a constant flow of students who visit the Center during recess or after hours wanting to see something new or study some special material.

Our teachers agree that the Touch and Learn Center is a valuable addition to the school. Our students are enthusiastic and tell us how interesting it is for them and how they appreciate getting to know about things which they would never have had the opportunity to study otherwise. We think that all other schools should try to build such a collection. Just as we did, they should try to get mounted animals, models and other objects from interested people in their neighborhood. If they have their own woodwork and metal shops, many models can be built there.

Recommendations

☐ I would propose that at a central office (perhaps the American Printing House?) good ideas be collected, and instruction and exact measurements about "How to build models" be distributed to interested schools.

The schools should be very careful not to end up with a curiosity shop or to spend money on exhibits which could be understood by sighted students only, or which are intended for college level. But something must be done and soon, in the interest of our blind students.

COMING IN NOVEMBER—a special issue of The New Outlook for the Blind devoted to papers from and news about the 1967 American Association of Workers for the Blind annual meeting in Miami Beach, Florida.

Teenagers Evaluate Mobility Training

DANIEL E. JOHNSON, Ph.D.
CHARLES GILSON

Doctor Johnson is coordinator of special education for the Alameda County (California) School Department and orientation mobility director. Mr. Gilson was formerly a mobility instructor for the project

Since March 1, 1963 blind teen-agers in regular secondary schools in Alameda and Contra Costa counties of California have been learning to travel independently using the long cane.

Two mobility instructors, financed by funds from the Department of Health, Education, and Welfare, drive to the regular junior and senior high schools which these students attend and give individual lessons in orientation and mobility skills. Most of the teaching is done during the students' physical education or study periods, and since the field work is done right in the students' own neighborhood, school, and town, there is a maximum of practicality and a minimum of disruption of the students' normal life—two values that rate high in special education. The original purpose was to demonstrate that itinerant instruction could be provided to many school districts from a single central office with a minimum of red tape.

Organization of program

Although the region served contains about a million and a half inhabitants living within an approximately thirty-mile radius of Hayward, California, during the first four years of this program (first as VRA Grant Number RD-1168-D and then as H. E. W. P189-10 Title III Project 1678) no children without travel vision in this population have graduated from high school without receiving mobility instruction. From the very outset, graduates immediately began traveling on their own, using public transportation. Some children still in school were able to do without the special taxi service which, in California, is one of the expensive items in the special education budget.

Making heavy use of the network of freeways in the San Francisco Bay area, the hard-working instructors managed to see five or six students a day but the students in the program only rarely had any opportunity to meet each other to compare notes. We wondered what they would have to say if we brought them together for a meeting. What did it feel like to undergo mobility instruction? What problems did they experience, and could they help each other solve those problems? Aside from our major goal of demonstrating that a regional itinerant plan would work, were we actually helping these students become more independent? We wondered.

Major goal: demonstrating that a regional itinerant plan would work

Students Meet To Discuss Mobility Training

☐ Consequently, in April 1966, thirty-five of the forty-nine blind junior and senior high-school students who have received long-cane training through the Alameda County project met at the West Campus of Berkeley High School to criticize and evaluate the service which they had been receiving. The students were divided into small discussion groups and, except for the discussion leader, they were free from adult surveillance. The conference was so well received that a second one was conducted in the fall of 1966 at a junior high school in San Leandro.

As was expected, there was much lively social interaction, which might be worth a report in itself. These general and personal comments, however, have been eliminated and the students' evaluations about their experiences during orientation and mobility instruction are reported here under the headings of crossing intersections, using guides, managing canes, and dealing with parents and peers.

Attitudes Toward Parents and Peers

☐ Parents generally were thought of as helpful, considerate, sometimes not truthful, and expectant of too much from their blind children. They did accept the cane and were happy to know their children had a chance to learn independence. Yet, some found it difficult to allow their children to move anywhere and to cross any street. Other parents expect their blind child to move anywhere and cross any street. These students thought their parents overexpectant. Others thought their parents worried too much about them crossing streets. Another student's parents willingly gave him independence.

Students want little help from parents in orientation

Basically, the blind students did not desire much help from their parents in orienting them to their surroundings. Many students thought their parents a nuisance when they went on walks. Several thought their parents gave disorganized environmental descriptions. A few parents did not walk with their blind children at all. Some students asked their parents to describe an area—then they explored while the parents remained at home.

Several students thought sighted peers had difficulty in accepting a blind person. The cane made little difference. The sighted person did not want to be seen with them. One boy said his sighted peers objected to the cane because it looked "funny." At that time, he continued, they did not know the capabilities of the cane. After observing him travel with it, his sighted friends realized the need for the cane.

Difference between friendliness and acceptance

Many students thought considerable effort had to be expended to become accepted because it is the custom of sighted people not to go out of their way to know blind persons. Some students believed you have to exert yourself constantly and get in with the crowd: "make sure people know you are there." The students agreed that there is a difference between what they labeled "acceptance" and "friendliness." As they used the words, friendliness means being sorry for a person and continuously offering assistance; acceptance means being one of the group—and not just being brought along because the others have a charitable feeling for you because you are blind.

One student made a point not to blame blindness for nonacceptance. If the blind person were sighted he might not be accepted anyway, she claimed. It all depends upon individual compatibility with others.

The Use of Canes

☐ Questions about cane preference were the focus of attention for some time during the group discussions. There was disagreement among some about the value of the fiberglass cane and how it compared to the folding cane. (The metal, crooked canes were not known to this group.) The folding cane was easy to tuck away when not needed, but it was not as sturdy and durable as the fiberglass cane.

Preferences—fiberglass vs. folding

For overall wear and tear and usefulness, the fiberglass cane held support. The groups did agree that the fiberglass cane had its shortcomings but concurred that this should not deter anyone from making the most of what he has. One teen-ager said, "The object of using the cane is to make it a part of you. Build it into your personality."

The fiberglass cane offered unique problems. Students were fearful that sighted students would trip over the cane if it were laid on the floor. There was no place to put it during assemblies in the auditorium. Some individuals suggested putting the cane in the corner next to a door. In the case of the auditorium assemblies, the cane would be left in some known place. After the assembly, the student could retrieve it. Some thought it was necessary to bring the cane with them to their seats no matter what conditions prevailed. It was better than hurting oneself on obstacles.

True independence impossible without cane

It was agreed that true independence was impossible without a cane. One student mentioned that because of canes, she and another blind student were able to explore and travel with confidence throughout their city. Another said a cane made it possible to go anywhere within reason.

When and where the cane should be used

There was a variety of answers about when and where the cane should be used. Students agreed it is necessary to use the cane outdoors. A minority of students clung to the idea of the impracticability of using the cane inside the school because crowds in school hallways hindered movement and use of the cane. One youngster remarked that use of the cane "depends on the amount of kids in school, and if you have a lot of obstacles."

Correct use of cane technique prevented any mishap in crowds, it was agreed. With a cane one girl was able to move faster over a long distance, enabling her to go about her school schedule in a normal way. Several others indicated that although they could get around school without the cane, they needed it for confidence and safety; therefore, they used it as much as possible. No one used canes within the home.

One student asserted blind people do not use their canes because they are embarrassed. Another insisted that it was impossible to use the cane in certain schools, but he did not explain further. Two students said that everyone was oversensitive about travel within school—it is necessary to use the cane and it should be taken care of! You should be equal to the task, not take advantage of sighted peers, and make the most of your mobility skills, they asserted.

☐ The question, "When should a blind person ask for sighted assistance?" was raised. Some students editorialized at length about why sighted help is not needed. One student thought that to admit a need for assistance was to destroy her image as an independent traveler. She conceded that her view changed somewhat during the discussion, and then restored her opinion as follows: "sighted people need to be educated about how to offer assistance, and refusing assistance sometimes leads to a messy situation." At this point, one student admonished sighted people for their lack of knowledge about the capabilities of the blind person. This statement brought a rebuttal from another participant who defended sighted people as nice and willing to help.

When Sighted Assistance is Necessary

A few suggested use of sighted guides for crossing intersections. Except for one boy who wanted to use girl guides of his own age group, all frowned upon use of sighted guides unless it was absolutely necessary.

How to decline sighted assistance

It was agreed that if a blind person wishes no help, he should decline it graciously so as not to offend. Situations where trainees believed they need assistance ranged from nebulous to concrete. Unusual events such as a truck blocking access to cross a street, deafening noise that occludes sounds, and uncertainty about whether traffic control signals are posted at a particular intersection are examples of situations that the students believed demand use of a guide. Students stated that on occasion they have to seek out assistance because sighted people will not always realize when it is needed.

At times, each student has been plagued with a hearing blockage when it is impossible for him to hear car sounds. At intersections this can be dangerous, and one student suggested that this was a time to use a sighted guide. One boy stated bluntly, "When you need help, use it. It's no disgrace."

During the summary one student remarked, "Some members felt you shouldn't ask for help. I think there are places where you should." Another retorted, "You can't get away from some people. You need more help after they get through with you than you did previously." Another suggested that to avoid problems with those who offer assistance, the student should be aggressive and tell the sighted person where he wishes to go.

The students reported they did not like it when sighted persons directed questions about the blind traveler to the mobility instructor instead of to the trainee himself. One student said he appreciated those occasions when the instructor had asked the trainee to answer the sighted people.

Intersections

☐ Students asked questions about nonsignal controlled intersections that had a lot of traffic. Most of them had such intersections near schools they attended; many students were afraid to cross them. They believed some intersections could be improved by control lights, and on the other hand, they were puzzled because other intersections with much less traffic did have controls. Apparently the students were assuming that the number of vehicles at an intersection is the only factor that leads safety engineers to install traffic signals. Several students suggested that heavy surges of morning and evening traffic justified certain traffic lights near their school, but one student pointed out that these controls were deceptive for sporadic traffic conditions. When no cars were present at these intersections, it was impossible to know when it was safe to cross. Another student pointed out that the scarcity of vehicles crossing a heavy traffic flow during rush hours made it difficult for him to draw a line of direction to the opposite corner.

Busy intersections without traffic controls caused one student a different kind of problem. She was apprehensive about cars which stopped in the intersection waiting for her to cross and wondered how to solve this problem. One student suggested that she allow the car to pass and then proceed across. Another advised using the waiting car as a directional clue, observing the traffic lanes, and then crossing when they were clear.

Busy intersections with traffic controls are particularly difficult when traffic turns a corner at them. Other students reported that loud noises from moving trucks or cars turning the corners caused difficulty in discerning signal changes. There was clear concensus that, regardless of the noise being made,

cars turning corners made it difficult to notice signal changes. One student said he nearly lost his cane when a car made a right turn on a red light (a legal maneuver in California), and his peers answered with the curt warning, "You have to be alert."

From these students' points of view, it can be fairly concluded that more skill is required to negotiate intersections that are controlled by traffic signals than those without them. At some intersections, pedestrians control the traffic signals by pressing a button. The students reported that it is difficult to be accurate with this type signal because it is difficult to coordinate the signal change with enough side traffic to provide a line of direction to the opposite corner. A humorous concern was expressed about those people who attempt to help the trainee, especially at intersections. The "help" distracts the student's attention. There was laughter at the expense of those sighted persons who earnestly inform the student about the traffic situation when in fact the student knows the situation well. At times, helpful persons inadvertently misinform the students about the condition of the signal, but to judge from their comments, none of the trainees seemed distressed by these occurrences.

Physical layout of intersections a problem

Except for the fact that sighted pedestrians tend to shy away when they notice the trainee's cane as he crosses the street, sighted aid was not disturbing. The real problem at intersections is the physical layout. Students reported that rounded corners lead to problems, and the less traffic, the more direction confusion rounded corners cause students. Some have had the experience of traveling diagonally through the middle of an intersection when they had not placed their feet over the curb correctly.

Suggestions from the group included advice that the line of direction be maintained prior to approaching a corner, thus placing less reliance on the curb itself. A suggestion that a braille compass he used was received with little enthusiasm. Several students indicated some humor about low-lying curbs or corners without curbs. They complained that at times the cane tip passed over the curb, causing them to trip. No one had found an answer to this problem. There was one complaint about problems caused by construction within intersections, but this complaint was not expanded by the student making it.

Medial strips and triangular islands caused concerned discussion within several groups. They considered it necessary to have a variety of skills in order to negotiate such intersections.

Street names confusing

The peculiar naming of streets was a topic in one group. Why should a street have one name, reach a main street, and then change to another name on the other side of the main street? This does not cause a problem in crossing streets, but the students were perplexed about why the situation existed.

Some students had nothing to say about intersections, explaining that they were being driven between home and school and that they had failed to experience difficulty with intersections. One student used a sighted guide to move about in his neighborhood because there were no sidewalks. Others did not walk home from school because of the amount of books they had to carry.

(Continued on page 237)

Preventive Child Psychiatry at a Residential School for the Blind

FRANK G. BUCKNAM, M.D.

Dr. Bucknam is consulting psychiatrist at Oak Hill School for the Blind in Hartford, Connecticut, and training director in child psychiatry at the Institute of Living, also in Hartford.

The social and mental health of the blind demands as much consideration as the physical defect itself. The absence of visual perception cannot help but affect the total personality development. Recent reports on the subject reveal that emotional illness is high on the list of secondary handicaps. In a recent survey of multi-handicapped children in the population of a residential school for the blind, forty-nine percent showed some form of emotional illness. In the course of training and educating these children, problems arise which require psychiatric consultation services to assist the staff in their solutions. In 1959 the Oak Hill School for the Blind in Hartford engaged the services of a child psychiatrist as one of its regular consultants. In that same year, a full-time social worker was added to the staff of the school. Psychological testing had for years been done by the staff of a nearby university on an appointment basis. However, in 1964 the school appointed a full time clinical psychologist for both testing and psychotherapy.

How would a psychiatrist function in the school setting?

One of the first problems was to determine how a psychiatrist would function in the school setting. There had been little experience on the part of other psychiatrists from which to draw. Louis Cholden's papers were an inspiration but dealt exclusively with services for adults. It was necessary for the staff to learn how a psychiatrist worked, and for the psychiatrist to learn all he could about blindness and its effect on human personality. It is interesting that the literature on the subject seems to be divided into two groups—that written by the sighted which is usually denounced by the blind as misinformed, and that written by the blind which again seems to contain some distortion and is certainly written with a good deal of bias. In time it proved that the children themselves were the best teachers as far as understanding of the blind is concerned.

Case conference first method used

The case conference was the first method of operation employed. Children were referred by teachers to the school principal, who together with the social worker decided on the priority as far as the psychiatrist's time was concerned. The psychiatrist saw the children in a modified play setting. At first the children would explore the premises seeking items of tactile or auditory interest. The use of play material in the usual psychodiagnostic process was almost totally lacking. However, the historical material that came directly from the children was often of great significance in contrast to the histories given by the parents.

Once the psychiatric interview had been concluded, there was a staff conference, which involved all the personnel who came in daily contact with the

Attempt made to involve all staff members

child. This included housemothers, nurse, recreationist, and dining room supervisor, as well as the regular teachers and school administrators. A purposeful attempt was made to involve each person so that the bits and pieces could be welded into a whole. For example, the dining room supervisor might be able to report on the quality of the child's appetite, particular food dislikes, phobic reactions to certain textures; whereas the nurse might tell of the frequency of visits to the infirmary, the significance of the types of symptomatology reported, the anxiety evoked by the announcement of a trip to the doctor's office. In this atmosphere of mutual respect for each other's contributions, the psychiatrist offered his findings and a staff discussion ensued. It was obvious at first that some sort of magical expectation existed including such fictions as expecting a psychiatrist to be able to read people's minds. Frictions occurred when it was felt that one person had invaded another's area of expertise.

One important factor which operated to make this service a success was the general understanding that once a child was admitted to Oak Hill, he was there to stay. Experience had dictated that it was the rare institution that would accept a blind child no matter how pressing his other disorder was. Even the state mental hospital was reluctant to admit blind children, feeling that the staff did not know how to handle their special needs. With this in mind, it seemed that everyone's interest was genuinely focused on finding ways for the child to make a better adjustment and for the staff to do a better job in handling the child since it was understood he would be staying at Oak Hill. Other drawbacks that had to be taken into consideration were the lack of staff time to do any ongoing case work with the parents, the lack of therapy time for psychiatric treatment of the children, and the difficulty of obtaining either of these services from outside agencies because of their fear of dealing with the blind. Nevertheless, a great deal could be accomplished through use of medication, individual staff attention, and the opinions of specialists in other fields. Eventually, the psychiatrist's time was increased to a day a week, which allowed time for group therapy and supervision of the psychologist who provided individual psychotherapy.

Specific Areas where Preventive Work Can Be Done

☐ In the course of time it became apparent that there were specific areas in which preventive work could be done that was beyond the extent of the remedial work done with individual children and their emotional problems. Two of these areas were excessive dependency and adjustment to adolescence.

Excessive dependency of the Blind

☐ The pathologic dependency of the blind has attracted much attention for centuries. The apparent helplessness of the blind in a sighted world has always evoked sympathy and led the blind to adopt the role of beggar. Since formal education for the blind began in the United States in 1832, attempts have been made to curb this tendency and prepare the blind for independent living. The residential schools which had done so much in this cause eventually found themselves the scapegoat for the persistent dependency seen in blind children. Frampton and Kearney, in their treatise on the residential school, detailed many of the complaints laid at the door of such schools.

Investigation of the methodology used at Oak Hill threw considerable doubt on their thesis. The practices used in training and educating blind children in Hartford seemed if anything to be designed to promote greater independence. Less than half the children showed dependency to a pathologic degree. It was thought that the school could not be the chief cause but that the etiology was more likely associated with family influences that had been in operation long before the child enrolled in the school. With this premise in mind, the workings of a preventive program evolved which consisted of the following steps:

A five-step preventive program worked out

1. Whenever a family made contact with the school, either for information or with a request for enrollment, the social worker made a visit to the home to see the child in his home setting and get a first hand view of how the parents handled the child. This supplemented the detailed history which was obtained. It was soon found that it often took many visits, sometimes years, to convince the parents that they would be helping their child by relinquishing their control and letting him be cared for in a boarding situation. The current vogue of public school class placement has much merit but unfortunately reinforces the pathologic patterns of overprotectiveness when they occur in families of the blind.

2. Once the decision had been made and the child was definitely on the list for enrollment, the psychiatrist called together the parents of incoming children for a meeting a few weeks prior to the start of school. The psychiatrist gave a brief outline and description of normal developmental sequence and the parents were invited to engage in a discussion. Although almost all of the parents could be called overprotective, certain ones stood out as being excessively so. These cases were earmarked for later consideration, but it was felt that at least the ground work had been laid in trying to introduce the idea to the parents that their children were far more capable of self care than they had imagined. Problems arising from the separation from the parents could be anticipated and discussed prior to the tearful separations that we knew would occur when the child was first dropped off at school. Specific problems, such as toileting, bathing, dressing, and feeding, were predicted and often evoked disbelief on the part of the parents.

3. The social worker was on hand the evening new children arrived at school to reinforce parents in their resolve to separate from their children even if the child was left crying. Otherwise, parents had a tendency to go back to see if the child had stopped the tears, only to bring on a fresh flood.

4. A follow-up meeting of parents was held about six weeks after initial enrollment and another one later on in the year. At these meetings the parents could share their reactions to their own trauma over separation from the child and at the same time share their amazement at the rapid progress the children had made. Since major improvement in self care was almost universal, it could be used to promote a conviction in the parents to ease up on protectiveness.

5. At staff conferences the psychiatrist was often a gadfly who provoked even further steps towards independence even though the orientation of the school was very much along that same line to begin with. Certainly, one could designate as almost miraculous the progress made through the persistent ef-

forts of the physical therapist in teaching a cerebral palsied child to do more coordinated activities that would lead to self care. For example, a six-year-old girl who had for her entire lifetime lain in bed and been cared for exclusively by her mother was able in the course of a year to be conditioned and trained to sit up and feed herself. Now in her second year at school she has been recommended for remedial surgery and has a good chance of eventually walking with braces.

Case histories emphasize need for program to prevent dependency

The following brief descriptions are given to emphasize the need for such a program. A boy who was six years old when first seen in 1956 presented the classical features of autism. He was mute, lacked human relatedness, failed to obey even simple commands, and was oblivious of danger in the environment. He turned night into day and, in general, was most difficult for the staff to cope with. Had he been left at home and cared for on a community basis it is doubtful the outcome would have been as successful. By the end of the first year he had begun to relate to people. A subsequent year of speech therapy achieved sufficient articulation to make cognitive testing possible. His initial intelligence quotient at age eight was 47. At eleven his IQ was only 67 and yet he was able to maintain a steady grade level achievement to warrant yearly promotions. It is understood that there were indications of greater intellectual potential in this boy than appeared on test scores. Nevertheless, the case points out the direction of improvement when the whole atmosphere is oriented towards independent functioning. Now at age seventeen this lad scores an IQ of 94.

Another boy remained at home until he was ten. He was not sick-appearing on admission. His speech was fluent and he related to people. However, the atmosphere at home had been overprotective. The mother had resisted all attempts by the visiting nurse and other agencies to get her to send her child to a residential school. Separation anxiety and overconcern about health had made public school attendance spotty. His intelligence quotient at age eleven after nearly a year at Oak Hill was 69. In contrast to the other boy of similar age and functional intelligence, this child was unable to make academic progress from even the most elementary grade level. He showed little inclination to explore his surroundings. His locomotion was slow and hesitant. After a year of individual psychotherapy it was concluded that he is rather hopelessly fixed in a passive dependent personality pattern to such a degree that his prognosis is poor. His intellectual development is stunted and he may well be a custodial burden the rest of his life. It is obvious in these cases that it is less a matter of what type of school placement is utilized (residential or public) but much more the parental handling in the early years which conditions the eventual outcome. A program of early intervention geared toward optimum self-sufficiency is essential.

Adjustment to Adolescence

☐ Adolescence is a time of marked change. The personality is in turmoil and a crisis period in personality development occurs. Gardner has summarized four major developmental goals of adolescence. (4)

1. Modification of the relationship to the parents, to give the person a feeling of psychological independence.

2. The establishment of one's own moral standards.

3. The reaching of adult sexual identification and establishment of sexual role.

Sexual development most interfered with by blindness

4. Resolution of education and vocational choices. Of these, sexual development seems the one most interfered with by blindness. This was discussed most openly by Cutsforth in a manner which must have been considered quite daring for his day. (5) He felt that it was impossible to solve this problem with a program of mental hygiene. Nevertheless, the degree to which the sexual problems of the adolescent can upset the entire staff of a school certainly called for some further attempts to solve the problems with a preventive program. One phenomenon seemed to stand out in the early cases that were reported to the psychiatrist. In this situation a teen-age girl whose dermal sensations had been heightened by the outpouring of sex hormones at puberty would misinterpret as a sexual overture the accidental brushing of her shoulder or chest by a teacher's arm in the course of leaning over to mark her paper. Her imagination, fired by stories exchanged with classmates, ballooned this into a sensational story of sexual assault. As is natural with a subject of this nature, the story leaked out to the staff and stirred up feelings against the teacher in question. The consequences were disastrous from a staff morale point of view.

Teen-age discussion groups started

As a prophylactic measure the psychiatrist set about establishing teen-age discussion groups. These were called "teen topics" and no attempt was made to set up the items to be discussed or to steer the conversation around to any particular issue. The children were allowed to talk freely with the agreement that the content of the discussions would be governed by professional confidentiality. At the beginning of the year some groups felt the need of formal organization with a program committee and written agenda. However, as the year went on such rigidity was abandoned and conversation was spontaneous. Group therapy techniques were used to engage quiet members and curb those who would otherwise usurp the entire session. Meetings were held for an hour every other week at a time which did not interfere with regular class schedule. After some experimentation, the junior high age group was found to be best and it was felt wise to keep the groups separated as far as sex was concerned. Since the psychiatrist was male, he employed the female social worker as a co-leader until 1964 when the new psychologist, who was female, could take over the girls' group.

Children had a great need to discuss sex

Although all the problem areas of adolescence eventually arose for discussion, it took many months for the subject of sex to appear. Once the children found it was permissible it became a predominant topic during the year in which each group met. Subsequent years have seen it occur earlier which indicates that the word gets around among the students despite their agreement to maintain the same confidentiality expected of the leader. In view of the amount of social isolation, the feeling of being observed and the intimacy of the subject, these children had a great need to discuss all matters pertaining to sexual development. The difficulties are of a practical nature. The adolescent is trying desperately to put into practice all the sexual fantasies that arise in his mind. The number of accidental collisions between students and staff members of the opposite sex increase markedly at this age. A good deal more overt tactile contact between students of the opposite sex is observed. In the group discussions, the students are able to share their anxieties about homosexuality, their concerns about their ability to attract members of the opposite sex, and the eventual question of being able to get married. The group setting provides an opportunity to bring reality testing to bear on some of the grandiose concepts the students might have concerning their sexual role.

The preventive aspect of this program has had its effect on the staff as well so that further incidents and rumors with sexual coloring have been coped with in a much more healthy and sensible manner.

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Teenagers Evaluate—*Continued from page 231*

Responses to intersections varied from group to group

The responses regarding what techniques to use at intersections varied from group to group, but there was a consensus that a traveler should use a combination of traffic sounds, sun, curb, and individual techniques. No one described what was meant by "individual techniques." Car sounds when kept to one side of the body will help in finding a straight line in crossing an intersection —that fact was generally accepted by all the trainees. Two students maintained that the successful crossing of any intersection depended upon how well you line up before starting. One girl attempted to explain her individual street-crossing technique and stated, "You must keep your wits and go straight." ☐

Summary

Blind students undergoing mobility instruction were brought together to evaluate their experiences and problems. They agreed that intersections rather than people are their greatest problem in traveling. They prefer to be independent but are not adverse to using sighted guides when it is necessary, and their favorite tool is the fiberglass cane. Parents in general are helpful, but parent attitudes range from oversolicitude to unrealistic expectations. Peers, like parents, can learn what cane travel means to blind adolescents.

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Report from Washington

Appropriations
H.R. 10368, the Legislative Branch Appropriations Act, was passed by the House of Representatives in June and contained an appropriation of $6,085,000 for fiscal 1968 for the Books for the Blind and Physically Handicapped program administered by the Library of Congress. The actual appropriation for fiscal 1967 was $4,594,000.

The Labor-HEW appropriations bill, H.R. 10196, was passed by the House of Representatives on May 25. It contained approved requests for $12,442,631,000 for HEW for fiscal 1968.

The bill includes the following items of special interest to readers:

LABOR	*1967*	*Requested*	*1968*
President's Committee on Employment of the Handicapped	$ 451,000	$ 462,000	$ 462,000
HEW			
OFFICE OF EDUCATION			
Educational improvement for the Handicapped	$ 35,075,000	$ 53,400,000	*$ 53,400,000
*($15,000,000 of the amount approved for 1968 is for implementation of Title VI of ESEA. The remainder is for Title III of P.L. 88-164 for training of personnel and for research and demonstration projects.)			
Library Services and Construction Act Title IV A (includes schools for the handicapped)	*	$ 2,120,000	$ 2,120,000
LSCA Title IV B (library service for the handicapped)	*	$ 1,320,000	$ 1,320,000
* (Only planning grant money was appropriated for these two programs in fiscal 1967)			
VOCATIONAL REHABILITATION ADMIN.			
Grants to states	$ 258,560,000	$ 311,550,000	$ 311,550,000
Research and Training	$ 60,325,000	$ 65,484,000	$ 62,440,000
Research and Training (For. curren.)	$ 3,000,000	$ 5,000,000	$ 5,000,000
Salaries and Expenses	$ 4,869,000	$ 5,621,000	$ 5,319,000
Transfer from Social Security Funds	$ 299,000	$ 336,000	$ 336,000
PUBLIC HEALTH SERVICE			
National Institute of Child Health and Human Development	$ 64,922,000	$ 68,621,000	$ 68,621,000
National Institute of Neurological Diseases and Blindness	$ 116,296,000	$ 128,633,000	$ 128,633,000
WELFARE ADMINISTRATION			
Grants to states for Public Assistance	$4,170,000,000	$4,124,300,000	$4,124,300,000
Grants for maternal and child welfare	$ 228,900,000	$ 239,320,000	$ 235,600,000
(includes) maternal & child health	$ 50,000,000		$ 50,000,000
crippled children's services	$ 50,000,000		$ 50,000,000
child welfare services	$ 46,000,000		$ 46,000,000
research, training, demonstration—child welfare	$ 9,000,000		$ 9,700,000
maternal & infant care	$ 30,000,000		$ 30,000,000
school age & preschool children	$ 35,000,000		$ 37,000,000
professional personnel—crippled children	$ 4,000,000		$ 7,000,000
research—maternal & child health and crippled children	$ 4,900,000		$ 5,900,000
Cooperative Research	$ 3,150,000	$ 4,170,000	$ 3,150,000
Research and Training (For. curren.)	$ 1,500,000	$ 1,500,000	(Disallowed)
ADMINISTRATION ON AGING			
(Appropriations have been deferred pending extension of authorizing legislation.)			
AMERICAN PRINTING HOUSE FOR THE BLIND	$ 1,027,500	$ 1,225,000	$ 1,225,000

As Congress approached the Fourth of July recess, many bills requiring action were still in the legislative process. The House Committee on Ways and Means was still working on H.R. 5710, the Social Security Amendments of 1967.

As introduced, H.R. 5710 provides for increases in Social Security cash benefits, extends and improves the rehabilitative and preventive services provided by the Public Welfare Amendments of 1962 for public assistance recipients, improves maternal and child health and crippled children's services, and extends medicare benefits to disability insurance beneficiaries, disabled children over 18, and disabled widows under 65. It also provides for cash benefits for disabled widows under age 62 under prescribed circumstances.

On May 25, the House of Representatives passed a "clean" bill H.R. 7819, the Elementary and Secondary Education Amendments of 1967. The bill amends Title VI of the Act to provide for the establishment of regional resource centers and the recruitment of teachers for programs for the education of handicapped children. It also amends the legislation authorizing the program of captioned films for the deaf to include educational media for all types of handicapped children. The Subcommittee on Education of the Senate Committee on Labor and Public Welfare began public hearings on the bill on June 23.

Postal Rates

On May 16, AFB's Washington representative testified before the Subcommittee on Postal Rates of the House Committee on Post Office and Civil Service in support of H.R. 7192 on behalf of AFB, AAIB, and AAWB. John F. Nagle, Washington representative of NFB, testified in favor of the bill. H.R. 7192 would amend existing postal laws affecting material mailed for the use of blind persons to include the physically handicapped who are unable to read or handle ordinary printed material and to simplify and improve the laws in various ways.

Two identical Administration bills, H.R. 8981, introduced by Rep. Carl Perkins (D., Ky.), chairman of the House Committee on Education and Labor, and S. 1681, introduced by Senator Lister Hill (D., Ala.), chairman of the Senate Committee on Labor and Public Welfare, would improve the federal-state vocational rehabilitation program. The bill authorizes appropriations of $500 million for fiscal 1969 and $600 million for fiscal 1970 for grants to the states for vocational rehabilitation services and prohibits the imposition of residence requirements as a criterion of eligibility for such services. Of particular interest is the authorization to the Vocational Rehabilitation Administration to establish a National Center for Deaf-Blind Youths and Adults as well as additional similar centers. No hearings on these bills were scheduled before the July 4 recess.

Another bill on which hearings will be held at the same time is H.R. 7396, which was introduced by Rep. Philip Burton (D., Calif.). This bill would eliminate the economic need criterion for vocational rehabilitation services.

On behalf of NFB, Rep. James O'Hara (D., Mich.) has introduced H.R. 9995, a bill designed to assure handicapped workers in sheltered workshops the right to organize into unions and engage in collective bargaining. No hearings have been scheduled on this bill.

I.P.S.

News in Brief

■ Jansen Noyes, Jr., Arthur L. Voorhees, and Mrs. J. M. Beck received awards for their services to the blind at the annual convention of the American Association of Workers for the Blind in Miami Beach, Florida, July 9-12.

Mr. Noyes, who has been president of the American Foundation for the Blind and the American Foundation for Overseas Blind since 1958, received the organization's highest award, the Ambrose M. Shotwell Memorial Award for Distinguished Service to the Blind. Mr. Voorhees, a specialist in rehabilitation at the American Foundation for the Blind, received the John H. McAulay Award for outstanding service in the placement of blind persons in competitive industry. The Alfred Allen Award, given to those who provide direct service to blind people, was presented to Mrs. J. M. Beck, executive director of Volunteer Services for the Blind in Philadelphia, Pennsylvania.

■ The National Institute of Neurological Diseases and Blindness is the sponsor of a conference to be held in December which will take an entirely new look at the field of services to the visually handicapped. It will be based on a systems analysis of the field to be made by an independent research organization. The organization that has been selected to do the systems analysis is the Organization for Social and Technological Innovation, Inc., (OSTI) of Cambridge, Mass. Dr. Donald A. Schon, president of OSTI, will be the principal investigator.

OSTI will prepare a core paper for the conference on the systems analysis, and will select and arrange for approximately five to six coordinating papers on selected sub-systems. Some 30 researchers from major federal and funding agencies will be invited to the conference as participants and observers to consider the papers and results.

The National Institute of Neurological Diseases and Blindness is supporting this research to aid it in planning future policy and programs and to assist local public and private agencies in determining needs and alternatives for social and technical innovations.

■ Dr. James J. Gallagher, president of the Council for Exceptional Children, has been named associate commissioner for the education of the handicapped in the office of education of the U.S. Department of Health, Education, and Welfare. Dr. Gallagher will be the commissioner's principal adviser on matters relating to the education of the handicapped, and will head the recently created Bureau of Education for the Handicapped, which administers programs designed to help states, communities, colleges, universities, and public and private agencies to meet the educational needs of the nation's handicapped children.

Before joining HEW, Dr. Gallagher had been, for a year, director of special projects for the education improvement program at Duke University, Durham, N.C., while on leave from the University of Illinois.

■ The American Foundation for Overseas Blind has announced the appointments of two regional directors. Paul J. Langan became director of the Middle East-North Africa regional office in Beirut, Lebanon in March. When the outbreak of hostilities in June caused the removal of U.S. citizens from that area, Mr. Langan returned to AFOB New York headquarters where he will remain until conditions permit his return to Lebanon. Mr. Langan, formerly superintendent of the Kentucky School for the Blind, has been a member of the AFOB professional staff since 1956 and has served as program consultant and director of the Europe regional office.

Dr. Jeanne Kenmore is the new director of the Europe regional office in Paris. Dr. Kenmore recently completed an assignment as AFOB's special education consultant to the ministry of education in Thailand. Prior to joining AFOB she was coordinator of courses on the education of visually handicapped children at the University of Minnesota.

■ Gerald Wynters has been appointed sales manager in the manufacturing and sales department of the American Foundation for the Blind. He will manage the sale of aids and appliances and the One-Fare Travel Concession program.

Prior to joining the foundation, Mr. Wynters, who holds B.A. and M.S. degrees from Long Island University, was an advertising coordinator for Freed Publications, and before that associate general manager of the Professional Detail Service, Inc.

■ Erratum: The first line on page 49 of the article "Siblings of Visually Handicapped Children" by Luciana Visentini Steinzor in the February *New Outlook* should read, "However, attitudes of kindness were expressed more often toward the blind than toward the sighted, while attitudes of aggression followed the opposite trend. . . ."

Coming Events

August 31-September 5 American Psychological Association, Washington, D.C.

September 1-6 American Sociological Association, San Francisco, California

October 1-5 National Rehabilitation Association Annual Conference, Cleveland, Ohio

October 15-19 National Industries for the Blind, Washington, D.C.

October 16-21 National Association for Retarded Children, Portland, Oregon

October 23-27 American Public Health Association, Miami Beach, Florida

October 30-November 3 American Academy of Opthalmologists, Chicago, Illinois

December 6-9 American Public Welfare Association, Biennial Round Table, Washington, D.C.

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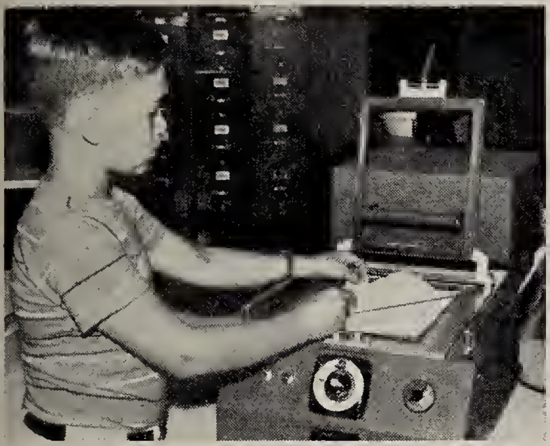

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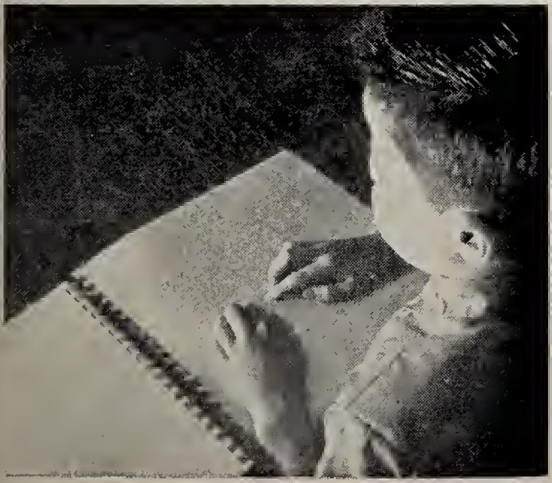

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THE NEW Outlook FOR THE BLIND

Blinded Veterans Today—*Robert Lee Robinson*

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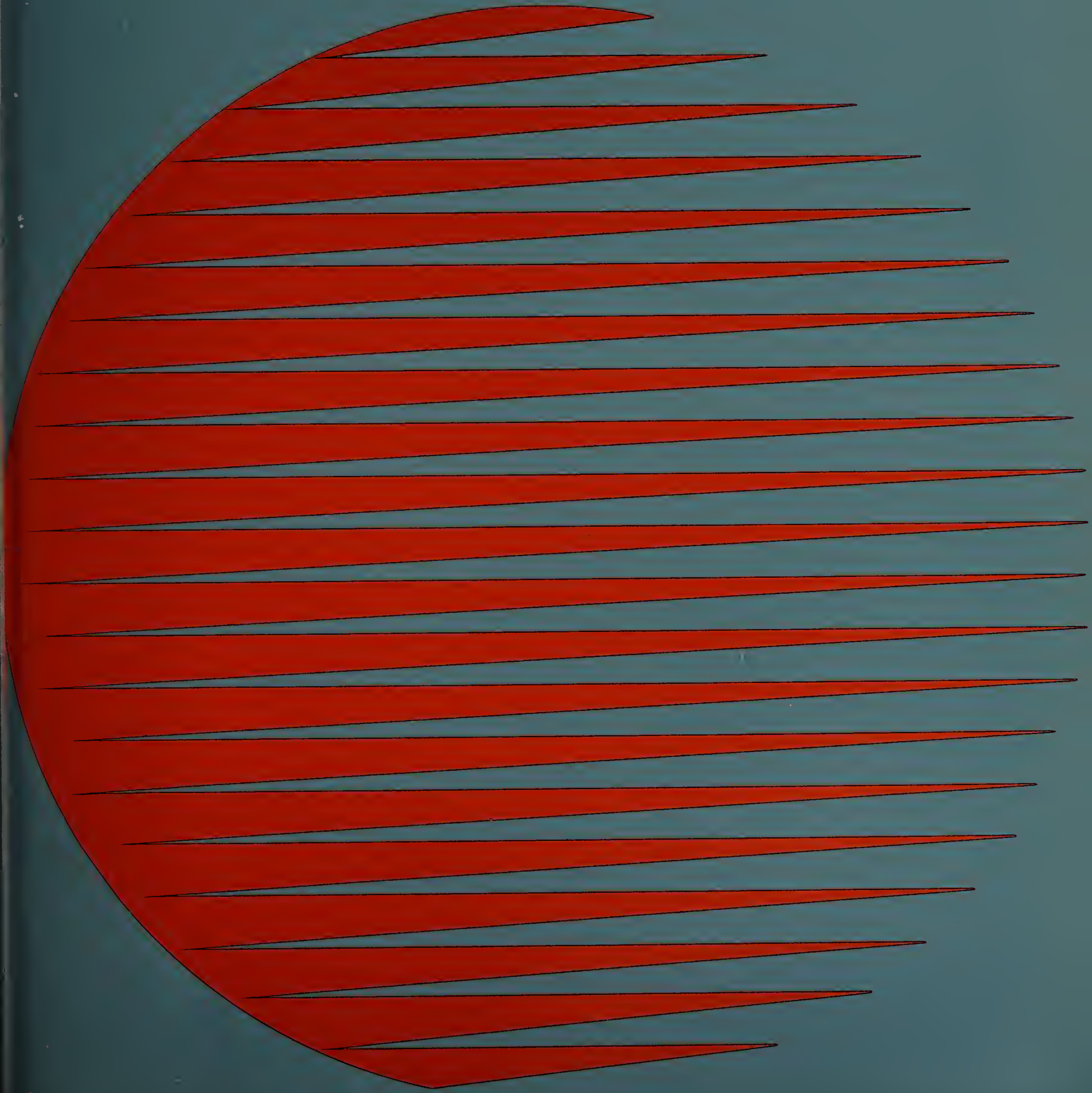
Charles Buell, Ed.D.

A 1966 Reappraisal of the Relationship between Visual Acuity and Mode of Reading for Blind Children
Carson Y. Nolan

October 1967 Number 8 Volume 61



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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

Assistant Editor
Mary Ellen Mulholland

Blinded Veterans Today

ROBERT LEE ROBINSON

Mr. Robinson, who is a research associate at the American Foundation for the Blind, was research director of the BV-64 project which was carried out by the Foundation in cooperation with the Veterans Administration.

When provided with adequate medical, social, and rehabilitation services blind persons can achieve a place in the community generally comparable to that of their sighted peers. This is the conclusion of a 1964 study of 851 blinded veterans which will be published next month under the title *851 Blinded Veterans—A Success Story.**

But perhaps more interesting and exciting than this optimistic finding is what is happening to the Veterans Administration (VA) program for blinded veterans as a result of the study. Changes in VA procedures and programs are already underway and more are expected. These will be outlined in the last half of this paper. But first, the background of the study, and then some of the findings.

Background

☐ The 851 are male veterans of World War I, World War II, or the Korean conflict. All have at least 70 percent visual loss and a service-connected disability which is compensable. Through interviews and examinations which were conducted in ten VA medical outpatient clinics in large metropolitan areas across the country, information was obtained about demographic, social, ophthalmological, audiological, psychological, and general health characteristics.

The 1964 study, hereafter referred to as BV-64, supported by the VA and carried out under the direction of the American Foundation for the Blind, is a follow-up to a 1952 VA social work study of blinded veterans published in 1958 under the title *War Blinded Veterans in a Postwar Setting.*

BV-64, then, is the second of what is hoped will be a series of studies on blinded veterans, reflecting the continuity of concern by the government for the welfare of its blinded veterans.

The populations of the 1952 and 1964 studies were not identical, although some veterans participated in both. Neither were the designs of the studies the same; however, the two together offer a longitudinal view of the blinded veteran in terms of his health, attitudes, and position in the community.

Findings

☐ All BV-64 findings could not be reported in the new book, but the raw data will be mined and sub-studies will be published. Work has already begun on an examination of the effect of race on employment and attitudes toward self, family, and community. Following are a few of the general findings reported in *851 Blinded Veterans.*

BV-64 men similar to general male population

Comparison of BV-64 and United States census data reveals that BV-64 men are in many ways similar to the general male population and/or the male veteran population: mean age is forty-six; they are generally heads of their households; most own their own homes and live with their wives in an averagesized family (3.5 persons); the proportion of nonwhites to whites is similar.

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* Published by the American Foundation for the Blind, New York. Price, $4.25.

The BV-64 differ from the general population mainly in that they have a major visual handicap; they have a higher rate of other impairments (80 percent receive disability compensation for service-connected injuries, losses, and conditions in addition to visual impairment); they are better educated; and their socioeconomic status is higher.

The average household income in the United States in 1964 was $6,600; for the blinded veterans' household, it was $8,600. Financial flooring, in the form of disability compensation, is one of the factors contributing to this difference in reported family household income. Other factors are that these men are well educated and for those in the work force, upwardly or laterally mobile.

Social workers who interviewed the blinded veterans found them mostly positive in their handling of rehabilitation experiences, family situations and relations within the community, and in their general pattern of family activities. Yet one-third have experienced marital disruption. A greater percentage are divorced, separated, or widowered and more are single and have never married than in the all-veteran population.

The BV-64 sample read more than the general population. Those who are moderate-to-heavy readers participate more in organizational activities and have a better self-image than those who are not readers.

Mobility techniques used

Concerning mobility technique, the BV-64 group reported the use of remaining vision, long canes, other canes, and dog guides, in that order. Eighty-three percent reported at least partial use of sighted guides, usually wives. It must be remembered that most blinded veterans use multiple types of travel aids; that is, at times, a long cane, and at other times, a sighted guide.

Ninety percent of the blinded veterans have been employed at one time or another since they left the military service, but only 38 percent were employed at the time of the study, with an additional 5 percent looking for work. In part, age accounts for the low percentage of employment (many are already of retirement age). Another significant factor is the high rate of multiple impairment that precludes work.

Lack of concern about eye care

One of the important findings of the study is the lack of concern about eye care: half of the sample had not seen a doctor about their eyes in five years, and only about 25 percent had seen a doctor during the year immediately before the study. This is especially pertinent because 17 percent have unstable eye conditions. It was in part this finding that led to the changes in VA procedures that will be discussed in a later section.

Programs for adequate care of hearing required

Hearing, of course, is of major importance to the blind person, and it was reported that 77 percent have no hearing loss in the speech range—the range most important to the blind person in maintaining communication. Only 5 percent have a moderate-to-severe loss in this range. But 75 percent show a hearing loss in higher frequency ranges, with 40 percent having moderate-to-severe loss. At this point, we do not know the prognosis for stability or deterioration of hearing at the higher frequencies and how further loss might affect the blinded veteran's ability to get around and to be oriented to his surroundings. But it is obvious that programs for adequate care of hearing are required.

Inaccuracy of audiometers causing concern

A recent statement by the Public Health Service suggests that there is further cause for concern about the BV-64 hearing data. In July 1967 the National Center for Chronic Disease Control of the Public Health Service reported that "... medical authorities at the Center believe that the use of inaccurate audiometers to measure hearing ability and detect ear damage or disease is widespread. . . ." The statement was based on the findings of a three-year PHS evaluation of audiometers conducted by the University of North Carolina's Audiometric Calibration Center. Not a single audiometer evaluated (and VA audiometers were included) met the study's calibration specifications. The Center is concerned about the medical implications of the inaccuracy of audiometers, and so are we, in relation to the audiometers used by the VA examiners to measure the hearing ability of blinded veterans both in the study and in ongoing programs. It is hoped, however, that all medical institutions will routinely calibrate their audiometers as soon as possible.

Impairments other than vision and hearing

Thirty-eight percent of the BV-64 sample have impairments other than those of vision and hearing. These include amputations, musculoskeletal conditions that limit activity, and mental disturbances. Twenty-one percent have no significant symptoms and no diagnosed disease, while approximately 5 percent have noticeable symptoms but no diagnosis. The remaining 74 percent have at least one chronic condition. Fifty percent have two or more chronic conditions, but only 18 percent of these are severe. The BV-64 sample thus divides itself into two groups: 21 percent with no health problems (other than visual loss, of course), and 79 percent with health problems of varying severity (in addition to visual loss).

VA Program—Research Utilization

☐ During the analysis and writing phase of the BV-64 project, the Veterans Administration was informed of the findings. The major information reported to the VA was that there was seriously inadequate eye care among the sample group and that many had multiple impairments and chronic health conditions, as well as other existing or potential problems of a medical, social, or psychiatric nature.

Earlier, at the request of the VA Central Office advisors to the project, a referral form was designed and included with the other examination and interview forms that were to be incorporated into each blinded veteran's VA file for future follow-up use.

As it became clear that blinded veterans have special problems and are not utilizing the existing VA program, serious thought was given to reorganizing some of the procedures involving blinded veterans. (The VA's general position concerning medical and other assistance had been that the agency exists, the veterans know this fact, and they must seek help. The VA ordinarily does not seek out veterans and offer them aid.)

Consultant on blindness appointed

The first step was the appointment of a consultant on blindness to work out of the office of the chief of Blind Rehabilitation Services in the VA Central Office. This person, himself a blinded veteran, visited some of the medical outpatient clinics where the project was underway. He also visited other VA field stations not participating in the BV-64 project but which were responsible for providing needed services to blinded veterans.

Appointment of this consultant, however, was but the first step in improving services for blinded veterans. Such a consultant (who will be expert in all phases of blindness) will be located at each of the Veterans Administration Rehabilitation Centers. His role will be to initiate and facilitate the integration of services for the blinded veteran—within the VA itself and within the home community of the blinded veteran.

Expansion and modification of rehabilitation centers

The Blind Rehabilitation Center at Hines Veterans Administration Hospital, Hines, Illinois, has long had a waiting list. (The veteran population grows older and visual loss occurs more frequently.) To help meet this need, a second center was opened in May 1967 at Palo Alto, California, and a third will open soon at West Haven, Connecticut.

The program at the Centers has been modified to meet the problems of aging and multiple impairment in those veterans now waiting admission. However, the programs continue to deal with newly blinded servicemen, and it is significant that between December 1966 and March 1967, twelve blinded servicemen were evacuated to the United States from all over the world including Vietnam, according to the Deputy Assistant Secretary (Health and Medical) in the Office of the Assistant Secretary of Defense. In July 1967, the chief of Blind Rehabilitation Services of the VA reported that there were thirty-five blinded veterans of Vietnam. Many of these men have additional injuries which result in multiple impairments.

But these changes—the appointment of consultants and the establishment of new Blind Rehabilitation Centers—are not the truly major change in VA policy.

VA will seek out blinded veterans who need assistance

Since February 1967, the VA has decided to make concerted effort to seek out blinded veterans who need assistance of any type. (Remember that heretofore, the VA has taken a passive role in the provision of services.) The VA is doing this primarily through the establishment of a visual impairment services team at each VA station that provides medical outpatient care. At the same time each blinded veteran will be requested to visit a VA outpatient clinic at least once a year.

The team will include a physician who will act as chairman and a social worker who will act as coordinator and secretary. Other physicians and blindness resource persons from within the VA and from outside agencies will serve on the team as the need arises.

When a blinded veteran is invited in for his annual check up, the team will arrange the appropriate physical examinations, including ophthalmological and audiological examinations. It also will review the veteran's need for replacement of prostheses and sensory aids. An attempt will be made to help the blinded veteran with any special problem he might have, and he will be informed of his rights and benefits from the Veterans Administration.

After the veteran has been seen in the clinic, his case will be reviewed by the team chairman and any necessary follow up will be carried out.

The Physical Medicine and Rehabilitation Service Program of the VA Central Office will be responsible for the care and treatment of all blinded veterans and for ". . . indoctrinating other station personnel in the disabilities which may be expected to arise from severe sight loss and blindness and to train these personnel in the special assistance which they should provide to veterans with such disabilities."[1]

Furthermore, every attempt will be made to integrate all services for blinded veterans—both within and without the Veterans Administration.

Conclusion

☐ In the final analysis, the use of research by service programs is the ultimate test of the value of the research. The Veterans Administration has already made some changes in its program for blinded veterans, partially as a result of the findings of BV-64. More changes can be expected, and in addition, much of the information in the study will no doubt be used by other agencies in their programs for the non-veteran blind.

This change in Veterans Administration policy with respect to seeking out the severely disabled veteran, in this instance the blinded veterans, who may need service, is also due to changes in the temper of the time. That is, other improved social and health services are to be found now in the social welfare program of the Department of Health, Education, and Welfare such as, Medicare, Medicaid, and Medicare Alert. These programs are an expression of our society's concern for other segments of the population—the medically indigent and the aged.

In short, it is unlikely that the Veterans Administration would have or could have changed its procedures for providing improved services to blinded veterans except for the fact that the time was propitious.

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[1] *Veterans Administration Manual Procedures, Blind Rehabilitation,* Sections 1-5, Paragraphs 18:01-18:20, February 1967.

Reorganization of American Association of Workers for the Blind Underway

This is a report on the plans for the reorganization and regionalization of the AAWB which were approved at the annual meeting of the organization this summer.

Reorganization of the American Association of Workers for the Blind has begun this fall, with the appointment of a Committee on State and Regional Organization under the chairmanship of D.C. MacFarland, Ph.D., Chief, Division of Services to the Blind, U.S. Rehabilitation Services Administration.

The committee, which will hold its first meeting this fall, is responsible for stimulating the organization of state chapters and developing and carrying out regional meetings and workshops.

Recruiting of a new executive secretary and two field representatives has been underway since August (when this article was written).

The Committee

☐ Dr. MacFarland's committee is Dr. Gordon B. Connor, New England Rehabilitation-For-Work Center of Morgan Memorial, Inc., Boston; Harold Richterman, Industrial Home for the Blind, New York; Harold G. Roberts, American

Foundation for the Blind, New York; Robert Woodstock, The Seeing Eye, Inc., Morristown, N.J.; Leon Hall, Business Enterprises Program, Georgia; William O. McGill, Chicago Lighthouse for the Blind; David Mendelson, California Division of Rehabilitation of the Blind, Sacramento; and Burt L. Risley, Texas Commission for the Blind, Austin. Following the fall meeting, work at organizing state chapters will begin as soon as possible, according to Dr. MacFarland. It is expected, he said, that each of the committee members will organize his own local and regional groups to work at recruiting new members, setting up state chapters, developing plans for state and regional meetings, and generally stimulating interest in a revitalized AAWB.

Approval for the reorganization was given during the 41st annual meeting of the AAWB in Miami in July, following a report by the Committee on Structure and Regionalization, headed by Cleo B. Dolan, executive director of the Cleveland Society for the Blind.

The reorganization grew out of a long recognized need for changing the public image and organizational structure in order to attract more members to the AAWB and to attract more persons into the field of service to the blind.

Several possible patterns of organization were considered. While a regional concept is to be preferred in the long run, the present small membership, the lack of geographic balance in members, and the lack of local organization upon which to base regional groups would make the immediate transition to a regional plan infeasible, the Dolan committee said. Thus, it recommended the establishment of state chapters as a first step toward ultimate regional groups.

Organization of Chapters

☐ Chapters will be organized on the basis of membership and population within a state. A chapter must have a minimum of fifty members in a state with a population of more than two million; thirty members in a state with population between one and two million; twenty members in a state with a half to one million population; and ten members in states with a population of less than half a million. Canada may organize a chapter on the same basis as that of a state with more than two million population.

All members of a state chapter will have to be members of the AAWB.

Each chapter will be allowed to name one of its members to the Board of Directors of the AAWB, except for those chapters with more than 100 members who will be entitled to name two members.

Each chapter must meet at least once a year and each chapter must agree to aid in planning and to support regional meetings. Each state chapter will collect dues, retaining one-fifth for its own use, and sending the other four-fifths to the national organization.

AAWB will provide chapters with staff assistance

The AAWB will provide chapters with staff assistance in planning and organizing conferences, institutes, and workshops; in public relations; in liaison between the chapter and the national organization; and if requested, in analyzing existing state legislation and supporting the development of necessary legislation within a given state.

The Committee on State and Regional Organization headed by Dr. MacFarland will meet regularly and report to the AAWB Board of Trustees twice yearly on the results of the chapter organization.

Whenever the chapters number more than twenty, the committee is expected to recommend organizational changes leading to regionalization. Target date for such reorganization is 1971.

AAWB to hold Biennial Rather than Annual Meetings

☐ Beginning with the 1969 meeting, the AAWB will hold biennial meetings instead of annual meetings in an attempt to help strengthen the regional meetings, and to benefit those members who cannot attend national meetings. In his presidential address to the convention, retiring president Louis H. Rives called for immediate and strong support of the reorganization as the only way to make the AAWB a viable and useful organization. Noting that state chapters and regional meetings will "bring the AAWB back to the grassroots, to the people who actually do the work in their home communities," Mr. Rives pointed out that many professional workers are unable to attend (and benefit from) the national meetings. State and regional meetings will especially help these persons.

Generally the new plan will result in better meeting the AAWB's mission. This mission, as set forth in the committee report and by Mr. Rives, is generally "to serve as an umbrella of concern for all those who are interested in supporting and improving services to blind persons," and specifically:

"To serve as a social action force at the national, state, and local levels in identifying the needs of blind people and in stimulating, promoting, and fostering the action necessary to meet these needs. . . .

"To serve as a forum at the national, state, and local levels for discussion and for the exchange of information. . . .

"To promote, foster, encourage, and carry out programs designed to improve the skills and to enrich the professional training of all personnel engaged in work for the blind. . . .

"To carry out a vigorous and continuing program to improve the professional status and dignity of these workers and attract the best qualified professionals to our field.

"To lend full support to . . . high standards of service. . . .

"To develop and carry on a continuing program of education and information on blindness and blind persons for the general public, for students, and for other professional disciplines and services available to blind people."

Back Issue Wanted

The New Outlook office needs additional copies, inkprint, of the March 1967 issue of this magazine.

Will any subscribers who are willing to share their copies please mail them to this office? We will send 40¢ in postage stamps for each copy received.

—*The Editor*

Physical Education for Blind Children in Public Schools

CHARLES BUELL, Ed.D.

Dr. Buell is a teacher of the visually handicapped in the Long Beach, California, Unified School District. Formerly, he was director of athletics at the California School for the Blind for twenty years.

Twenty years ago, ten percent of the blind children were being educated in the public schools of the United States. Today over sixty percent of the visually impaired children are receiving their education in the schools of the communities where they live. This is a comparatively rapid change in the approach to the education of blind children. It often takes some time for most school districts to accept the changes made earlier by the leaders. The writer believes that it is only a matter of time before all public schools will accept their responsibilities to offer all the education that is feasible for all of their children, including those who happen to be legally blind. A conservative estimate is that two-thirds of the public schools which have blind pupils have not as yet offered them any real physical education.

Some schools give marks for physical education that are unearned by the children. At one school, the blind pupils spent the physical education period standing outside the gymnasium door. For blind pupils in other schools, the physical education period consists of sitting and keeping score for their sighted classmates. Another practice is to assign checker playing and similar activities to blind students during their physical education period. The writer has in his files a letter explaining a change from checker playing to a more realistic physical education program. The attitude of the students changed from disliking the period to looking forward to it. As most physical educators know, physical fitness is attained through vigorous, not mild exercise.

Blindness in itself is not a reason to excuse pupils from vigorous activity. However, those blind students who have medical conditions which might be aggravated should be assigned a milder program of physical education.

Vigorous exercise necessary for blind children

The concept of vigorous exercise for blind children must be emphasized. The director of the Perkins School for the Blind, Dr. Edward Waterhouse, said, "Adult life makes greater physical demands on the blind than it does on the seeing." A blind person must expend much more energy to reach the same rung of success than does one who has normal vision. This principle applies, whether he is crossing the campus or working for a college degree. Therefore, physical education is even more important for blind individuals than it is for others. The public schools believe that it is important to give physical education to their pupils, and this must also include those who are visually handicapped. Such a program is entirely feasible, and the reader will find references listed at the end of the article which explain how this is being done.

Public attitude to blindness obstacle to physical education

The reason that many blind children are not being offered physical education is the attitude of the public toward blindness. Certainly, the loss of sight may curtail activities in some respects for some boys and girls, but this does not mean that they should be neglected or assigned to a table game. There are ways and means that are used by understanding school personnel to bring to blind pupils a vigorous and useful program of physical education.

Reasons Why Physical Education Is Not Offered to the Blind

☐ The reasons usually given by school personnel for not offering physical education to their blind pupils are as follows:

1. The belief that blind children have more accidents and injuries than do those who have normal vision.
2. The belief that blind children are unable to participate in activities of the regular or adapted programs of physical education.
3. The belief held by some physical education teachers that a blind child requires much more supervision on the part of the teacher.

Are blind children more prone to injuries?

An accident to a blind child should be of no more concern than to any other child. More than 130 years ago, Dr. Samuel Gridley Howe said, "Do not too much regard bumps upon the forehead, rough scratches or bloody noses, even these may have their good influences. At the worst, they affect only the bark, and do not injure the system like the rust of inaction."

Recently Mr. William A. Flynn, principal of Buena Vista School in Walnut Creek, California, said: "The accident rate on campus during normal play activities and physical education classes is 99.9 percent nil. If allowed to play, or taught modified rules, the blind children can play most games that are enjoyed by all children. Tether ball is an all-time favorite. Other activities are four-square, kick ball, whoopla ball, flag football and softball. (The blind use a batting tee for their turn at bat). Folk dancing is another favorite. We've found out that once we convince ourselves that the blind can do these things, then they are quick to grasp this confidence from us."

The writer visited the Washington Irving Junior High School in Los Angeles where he observed a very active program for blind children in progress. Referring to this program, Elbert J. Stark, chairman of boys' physical education, recently wrote: ". . . During the past eight years the braille students have been at Irving Junior High School, they have not suffered one serious accident or injury."

Genevie Dexter, consultant in physical education of the California State Department of Education, sums up the problem of injuries among blind children when she writes: "From observation, informal reports, and the lack of statistical data, there is no evidence in California that blind children have any more accidents than their seeing peers."

How blind children fit into public school physical education programs

Most public schools that are now giving their visually impaired students physical education do so in the regular classes, but sometimes include a few modifications. One such school is the Robert E. Lee School in Long Beach, California. The principal of the school, Dorothy Maas, recently said:

> Our blind youngsters are expected to participate in all physical education activities provided for the entire student body. In some areas, they are assisted by the children with normal vision. For example, in running to develop stamina, a sighted child and a blind child will join hands and run along together.
>
> No help is needed in warm-up exercises. In the fifty-yard dash, a rope with knots

at various distances plus a leather glove allows a blind youngster to do it on his own. Our youngsters took part in the president's survey in physical fitness for this even. . . .

We do not find that blind children have more accidents than sighted children. We feel that by actively participating in physical education activities, the blind children not only strengthen their bodies and muscles, but also develop confidence in being able to be mobile and a sense of satisfaction in being able to compete with their sighted classmates.

On a city-wide basis there were sixty-five visually handicapped boys and girls receiving special attention during the school year 1966-67 in Long Beach, California. Concerning their physical welfare, Robert M. Benson, assistant supervisor of special education for the city, said:

> It has been my experience that the successful integration of visually handicapped students into regular physical education activities at all school levels is dependent upon gaining the interest and support of at least one regular staff member. Once interested, it is much easier for a principal, department head, or individual regular teacher to convince his co-workers than for the special teacher to do so. Our students participate in a wide range of activities including swimming, weight lifting, gymnastics, wrestling, and certain track events. We have not found safety to be a problem.

The program at Washington Irving Junior High School was referred to earlier. When asked to mention specific activities, Elbert J. Stark replied: "Besides our usual physical education program, the boys also take part in weight lifting, combatives, wrestling, basketball shooting, rope skipping, track, tug-or-war, etc. I have also devised a game of soccer baseball for our corrective classes. It consists of placing a soccer ball on a batting tee; the boys strike the ball with the bat and with a sighted boy, they must run to the pitcher's mound and back to home plate before the ball reaches the catcher."

The high school in Hillsdale, California, and some other secondary schools follow another plan that has certain advantages. In this plan the blind students are placed according to units of instruction, rather than assigned to classes. Thus, a pupil with a visual impairment might take units in wrestling, swimming, weight training, dancing, rebound tumbling, gymnastics, and fitness exercises. During the year the blind pupil becomes a member of three or four classes for varying lengths of time.

For the most part, it is the major sports that need some modification for blind players. Other activities than those listed in the above paragraph which need no modification are bowling; judo; combatives; some track and field events such as standing broad jump; many relays; rope climbing; rope jumping; tug-or-war; hiking; roller skating; ice skating and other winter sports; rowing; water skiing; water cycling; tandem cycling; horseback riding; fishing, and camping.

Visually handicapped boys and girls feel much more comfortable taking part in activities which need not be modified for them. Also it should be remembered that an individual attains more physical fitness in those sports in which he exercises more vigorously. Furthermore, a blind child can gain much more respect from schoolmates by participating in unmodified activities. This is not to say that a blind child's education should not be rounded out by some participation in sports that must be modified for him. However, where the program permits, it is desirable to spend most of the time in unmodified activities.

Does a blind child require more supervision from the teacher?

Having a blind child in class need not mean more supervision for the physical education teacher. This problem can be solved by pairing a blind child with a classmate who has normal vision. In almost every class there is a boy or girl who is willing and capable of giving only necessary assistance. It is very helpful to the members of the class to know something of the needs, desires, and abilities of their blind classmate.

As the class progresses from activity to activity, the blind pupil, if given the opportunity, will gain the respect of his classmates. He does this by demonstrating his many abilities. When a child gains the respect of the class, he becomes an integral part of the group. No longer is he standing on the sidelines.

A few months ago the writer visited Indian Hills Junior High School in Shawnee Mission, Kansas. The blind boys and girls were taking part in the regular physical education program of fitness exercises, relays, volleyball, rope skipping, square dancing, and tumbling. It was impressive to observe the sighted children quickly giving whatever assistance was needed by their five visually handicapped classmates. In these classes the teacher was not burdened with additional supervision.

Consultant Service and Workshops Needed

☐ A good program of physical education for visually handicapped boys and girls requires much specialized knowledge. For this reason, it is highly desirable that such consultant service be offered by the United States Office of Education, and the departments of education in the larger states and in the more populous cities. These consultants should be available to discuss problems and answer questions concerning physical education of children with impaired vision. They should visit schools and lead demonstrations when asked to do so.

With such a service available to give confidence, it is likely that many more schools would start a program of physical education for their blind students.

To date, only two workshops or institutes have been held for teachers who have blind children in their physical education classes. At the first workshop, held in Michigan, most of the discussion centered around the program in residential schools for the blind. A few months ago, fifty educators, therapists, and school nurses attended a three-day institute in Kansas. Here, full attention was given to the improvement of physical education for visually handicapped children in the public schools of the state. Demonstrations were conducted, showing blind children participating in regular gym classes in a public junior high school. As visiting consultant, the writer joined a group of local educators and doctors to carry on the workshop. The institute was initiated by Mrs. Clara Robertson, special education consultant for the State of Kansas, and was federally financed under public law 88-164. Many more institutes are needed in other parts of the United States. If financed, at least in part, with federal funds, it is much more likely that such workshops will be held.

Resource and itinerant teachers should be involved

Until the services mentioned above are available to a school, it would be helpful if the resource or itinerant teacher of visually handicapped pupils would give suggestions. This means that these teachers should have a working knowledge of physical education for blind children. They should know something about the activity program and how it fits into the public school physical education classes. Before a teacher can convince an administrator to start such a program, he must believe in its value. Unless this teacher does, he would be of little value as a consultant in physical education.

Some Visually Handicapped Athletes

☐ Apparently, there are still a great many blind children, their parents, teachers, and administrators who are unaware of the accomplishments of visually handicapped athletes. It is easier for parents and teachers to help a child accept a vigorous program of physical education if they can cite specific cases of accomplishments of other blind individuals. Actually, there are many, many outstanding performances that could be cited, but lack of space will not permit. However, a few athletes in a few sports will be mentioned here to give the reader some idea of what can be accomplished by some visually handicapped pupils.

Wrestlers

Not all blind wrestlers are found in residential schools for the blind. For example, in 1962 Jim Piel won the Missouri State wrestling championship, wrestling for Excelsior High School. During the 1966-67 season, Russell Hubley won eleven and lost eight bouts while wrestling for Bolsa Grande High School in Garden Grove, California. The fact that Russell Hubley was selected by his teammates as co-captain is an indication that he was accepted, and gained their respect. This same boy walked fifty miles in one day.

This year twenty-five blind wrestlers earned one of the top five places in the finals of various state wrestling meets. For example, Stephen Welch placed fourth in the California State wrestling meet. A week earlier he had won his second city championship in Oakland, California. Wrestling for Oakland Technical High School, Stephen Welch compiled a seasonal record of 21-2. He was also elected president of his senior class.

Football players

From time to time legally blind football players gain honors. During the fall of 1966 William Wayne Pittman played center for a team from the South Carolina School for the Deaf and Blind which competes with other public high schools of the state. The coaches of the Northwestern 1-B League unanimously selected him as a member of the all-conference team. In Colorado, Larry Kopcho won a similar honor.

Gymnasts

For the past two seasons, Tom Bruce has won letters competing on the very strong gymnastic team of the University of California, Berkeley. His specialties are the long-horse and the horizontal bar. In high school he placed second in the Northern California State Championship all around competition.

During the 1966-67 season, Sue Campbell placed second in vaulting in the junior high school division of the New Mexico State Gymnastic Meet.

In the fall of 1966 Gary Vann placed sixth in a field of one hundred runners in a six-mile race around Lake Meritt in Oakland, California. He is a pupil at Homestead High School in Cupertino, California.

Swimmers

Outstanding performances in the water include King Nawahi's twenty-six-mile swim from Catalina to the mainland in 1946. Each year a crew from the New York Institute for the Education of the Blind rows four or five races against private and public high schools. In 1963, a sightless father and proficient swimmer, William Schmidt of California, rescued his three-year-old daughter from the deep end of the family swimming pool and revived her with mouth-to-mouth respiration.

Ice skaters

In ice skating, Elwin Kelsey and his partner placed fifth in the 1964 National Junior Pairs competition. In 1965 he became a professional by joining the Shipstads and Johnson Ice Follies traveling troupe.

Bowlers

There are thousands of legally blind bowlers in the United States, many of whom have no vision. At the 1965 International Bowling Congress Tournament, sightless Jenny Reeves of Oregon bowled a three-game series of 454 without a guide rail.

The performances listed above represent only a small percentage of many triumphs that legally blind individuals have gained in the sports field. However, it should present enough evidence to make it crystal clear to those who are doutful that visually handicapped individuals not only can, but do participate in athletics effectively and with as much safety as enjoyed by others. Certainly these athletes would not have achieved these skills if they had not been active during their younger years.

☐ Physical education for blind children in public schools is feasible. In fact, some public schools are now offering excellent programs. Energetic and intelligent leaders have solved the problems which sometimes have been difficult. Let us hope it will not be too long before all communities offer physical, as well as academic education, to all of their visually handicapped children, including those without sight.

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A 1966 Reappraisal of the Relationship between Visual Acuity and Mode of Reading for Blind Children

CARSON Y. NOLAN

Mr. Nolan is director of the department of educational research at the American Printing House for the Blind in Louisville, Kentucky.

The determination of the most appropriate mode of reading for legally blind children with varying degrees of visual acuity and varying visual pathology has long been a problem. The recent research by Barraga (1964) and confirmation of its findings by Ashcroft, et al. (1965) have heightened interest in this area. To date, no direct research attack on this question has been made. However, two studies describing relationships between degree of vision and mode of reading of blind children have been published.

These studies (Jones, 1961; Nolan, 1965) were based upon data supplied by the American Printing House for the Blind and were obtained in 1960 and 1963 through registration of legally blind children under provisions of the Federal Act, "To Promote the Education of the Blind" as amended by Public Law 922, eighty-fourth Congress. The study reported in this paper represents a replication of these studies based on data gathered as of January, 1966.

Procedure

☐ The forms for registration of legally blind children require recording the name of the school system, the names[1] of legally blind children enrolled in the system, the grade level of each, the degree of vision in each eye with correction as reported by an eye specialist, and the reading medium employed by each child. In 1966, reading media categories included on the form were expanded to include braille, braille and large type, large type, large type and normal ink print, normal ink print, auditory media, and none.

In the present study, students were categorized by type of school system attended, grade level, predominate reading medium, and visual category. Assignments to visual categories were made on the basis of corrected vision in the better eye. School categories included public day schools, residential schools for the blind, commissions for the blind, and residential programs for the multiply handicapped blind. Students educated under commissions for the blind might be enrolled in either day school programs or residential schools for the blind.

Visual categories

The visual categories used in this study closely resemble those used in the previous two studies, but have been slightly modified to make them correspond to the visual notations suggested in the *Eye Report for Children with Visual Problems* published by the National Society for Prevention of Blindness. These categories are as follows:

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[1] The identities of individual children registered as enrolled in educational programs throughout the United States are considered as privileged communications and are not available for public use.

Category	*Visual Acuity or Designation*
I	20/200-18/200
II	17/200-13/200
III	12/200-8/200
IV	7/200-3/200
V	2.5/200-.4/200
VI	counts fingers
VII	hand movements
VIII	light projection or perception
IX	totally blind

As before, gross groupings of children were made in order to create sizable numbers within categories. All visual acuities, regardless of their initial base, were recomputed to the base 200. The "counts fingers" category (VI) includes children whose vision was noted as "C.F." The category "hand movements" includes children with notations of "H.M.", gross form, and object perception regardless of the distance involved. Category VIII includes children whose vision was noted as light projection, light perception, or L. P. The classification "totally blind" included those reported as such as well as reports of "none," "enucleated," and "prosthesis."

Subjects

In 1966 the total registration of legally blind students with the American Printing House was 19,303. Removal of eligible adult trainees reduced this number to 19,007 children enrolled in school programs within the United States. In comparison, enrollments for 1960 and 1963 were 14,574 and 17,110 respectively.

The data analyzed for this report are based upon the records of 18,652 children which fitted the format of the study. Consequently, it was necessary to omit data on 355 children. Among these were 183 children who were identified as having restricted fields of vision. This number contrasted with 138 such children reported in 1963 and seventy-four reported in 1960. In 1966, 172 children whose grade level or visual category was reported ambiguously were omitted from the study.

Results—Visual Levels

☐ Because of the change in the reporting system, it was not possible to compare exactly school categories for enrollments in 1966 with previous periods. Crude analyses indicate that local school enrollments increased about fifteen percent while those of regular residential schools remained static. Approximately 270 legally blind students were enrolled in residential programs for the multiply handicapped. These predominantely were programs for the deaf-blind (fifty students) or mentally retarded blind. About 650 students are being educated under the aegis of state commissions for the blind. Since it is not possible from the records to determine which of these children attend local schools or which attend residential schools, the data describing this group have been analyzed separately.

Table one gives the proportions of students falling in each visual category within each of the four school categories. The distributions of these proportions for local schools, residential schools, and the total group do not depart significantly from those reported in previous years. As before, local schools

Table 1

Distribution of Students According to Degree of Vision Within School Systems

School System	*Visual Categories*									*Total N*
	I	II	III	IV	V	VI	VII	VIII	IX	
Residential	.17	.03	.08	.05	.02	.09	.05	.21	.29	6886
Local	.48	.06	.11	.04	.01	.04	.02	.09	.16	10835
Commissions/ Blind	.38	.06	.11	.04	.01	.05	.03	.12	.18	663
MH Residential	.08	.00	.02	.01	.00	.01	.04	.24	.59	268
Total N	6690	928	1819	860	195	1065	529	2544	4022	18652
Proportion	.36	.05	.10	.05	.01	.06	.03	.14	.22	

are characterized by populations of high relative visual acuity and residential schools by populations of relatively low visual acuity. The visual acuity levels for students under supervision of state commissions appear to fall between these extremes. Blind students enrolled in residential programs for the multiply handicapped appear to be characterized by severe visual loss.

Mode of Reading and Degree of Vision

☐ Comparison of the 1960 data with those obtained in 1963 revealed a significant shift in reading patterns. Overall this consisted of a five percent decrease in the number of students reading braille and a five percent increase in the number reported reading large type. This shift occurred primarily among readers falling in visual categories II and III who were enrolled in residential schools for the blind.

Table 2

Comparison of Distributions of Mode of Reading by Visual Categories

Reading Mode	*Visual Categories*									
	I	II	III	IV	V	VI	VII	VIII	IX	Total
					1963					
Braille	.09	.15	.24	.43	.71	.64	.91	.98	.99	.53
Large Type	.86	.77	.67	.47	.22	.28	.06	.02	.00	.43
Both	.05	.08	.09	.10	.07	.07	.03	.07	.00	.04
					1966					
Braille	.07	.13	.18	.36	.59	.52	.83	.93	.95	.46
Large Type	.64	.63	.56	.42	.29	.33	.09	.02	.00	.36
Both B and LT	.04	.06	.09	.11	.07	.08	.03	.01	.00	.04
LT and Ink Print	.15	.10	.09	.07	.01	.02	.01	.00	.00	.07
Ink Print	.08	.06	.05	.03	.02	.02	.00	.00	.00	.04
Auditory	.01	.02	.02	.02	.02	.02	.04	.03	.04	.02

Table two presents data on visual categories and reading media for the years 1963 and 1966. These data are not strictly comparable since the number of possible reading categories was increased from three to six in 1966. Under the new reporting system, both the proportions of students reading braille and large type again shift. Braille readers show a decrease in every visual category. This change probably reflects a continued true shift toward large type plus an artifactual shift resulting from the addition of the auditory category. Large type readers in the higher visual categories I-IV show a decrease which may reflect a trend toward use of visual aids to read smaller type or be a simple artifact of the addition of new categories. The increase of large type readers in visual categories V-VII probably represents a true shift from braille. It is interesting to note the substantial proportions of students falling in visual categories I-IV who are able to utilize regular ink print books.

Braille readers show a decrease in every visual category

In summary it can be said that forty-six percent of legally blind children is reported reading braille as compared to fifty-three percent in 1963 and fifty-eight percent in 1960. Thirty-six percent of this group was reported as reading large type compared with forty-three percent in 1963 and thirty-eight percent in 1960. A surprisingly significant group (eleven percent) is reported as using regular ink print, at least to some extent. Consequently, there appears to be a consistent trend toward increased use of residual vision.

Consistent trend toward increased use of residual vision

Table 3

Comparisons of Proportions of Large Type Readers by Visual Level for School Systems

Schools	*Visual Level*								
	I	II	III	IV	V	VI	VII	VIII	IX
					1963				
Local	.92	.86	.80	.60	.38	.50	.13	.04	.01
Residential	.65	.61	.45	.32	.12	.16	.03	.00	.00
					1966				
Local	.67	.69	.63	.50	.40	.41	.14	.03	.00
Residential	.64	.57	.49	.32	.22	.28	.06	.01	.00
Commission	.17	.21	.19	.27	.00	.17	.05	.01	.00
MH Residential	.29	1.00	.40	1.00	.00	.50	.09	.02	.00

Data comparing large type readers grouped by visual category and schools appear in table three. Proportions of such readers reported by local schools in visual categories I-IV show a considerable decrease over those reported in previous years. This drop quite possibly is due to addition of the ink print reading categories in 1966. Much closer agreement appears to exist in the proportions of large type readers reported for local and residential schools than in previous years. This, however, is misleading since non-large type readers in residential schools tend to read braille while those in local schools tend to read ink print. Residential schools continue to show a trend toward increase in proportion of students reading large type in the categories representing lower degrees of visual acuity. Large type readers do not seem to predominate in most of the visual categories for students educated under commissions or within residential programs for the multiply handicapped.

Table 4

Comparisons of Proportions of Braille
Readers by Visual Level for School Systems

	Visual Levels								
	I	II	III	IV	V	VI	VII	VIII	IX
					1963				
Local	.04	.08	.12	.29	.58	.41	.82	.94	.99
Residential	.25	.28	.44	.59	.79	.78	.95	.99	1.00
					1966				
Local	.04	.07	.10	.25	.51	.42	.72	.91	.94
Residential	.22	.30	.35	.52	.68	.62	.92	.97	.99
Commissions	.01	.02	.07	.12	.38	.28	.38	.72	.81
MH Residential	.29	.00	.00	.00	.00	.00	.45	.55	.60

The data on braille readers reported in table four reflect the trend to increased use of residual vision noted earlier. Small decreases since 1963 are reported in almost every visual category for both local and residential schools.

As is the case with large type, commissions and residential programs for multiply handicapped report fewer braille readers within most visual categories.

Table 5

Comparisons of School Systems for Proportions of Students Having Vision of Object Perception or Better or Light Perception or Worse

	Visual Categories	
	I-VII	VIII-IX
Local	.75	.25
Residential	.50	.50
Commissions	.69	.31
MH Residential	.18	.82

Table five gives the proportions of students in school systems who possess object perception or better (Categories I-VII) and vision of light perception or worse (Categories VIII and IX). Such data for local and residential schools have been stable since first reported in 1960. It is interesting to note the large proportion of severe visual disability found among students enrolled in residential programs for the multiply handicapped.

The degree to which use of residual vision is stressed among school systems is illustrated by the data in table six which reflect the reading media used by students having vision of object perception or better. In local schools the use of large type is predominate for this group, while in regular residential programs a heavier emphasis on the use of braille is noted. Both these programs are in marked contrast with those educational programs sponsored by commissions for the blind where most students are reported reading regular ink print. The reasons for these differences are not apparent in the data. However, since local schools report more students with higher degrees of vision than residential schools or commissions, the expectancy would be that students enrolled in this system would show greater frequency for reading regular ink print.

Table 6

Comparison of Mode of Reading and Type of School System for Students with Vision of Object Perception or Better

Reading Mode	Local	Residential	Commission	MH Residential
Braille	.10	.43	.10	.25
Large Type/Braille	.05	.09	.00	.20
Large Type	.63	.44	.16	.37
Large Type/Ink Print	.15	.02	.07	.02
Ink Print	.05	.00	.56	.02
Auditory	.01	.00	.10	.06
None	.00	.00	.00	.08

Grade Distributions

☐ Data enabling comparisons of grade distributions for blind students since the initial study in 1960 with those for total pupil enrollment in the U.S. are given in table seven. The data for 1966 correspond quite closely with those for the U.S. in 1958. Comparison of the three distributions for the blind reveals the shift in relative proportion of blind students in grades that reflects the last of the retrolental fibroplasia surge within the schools. The proportion of legally blind students classified as ungraded has doubled since 1960. This continues the trend exhibited between 1960 and 1963 and, hopefully, presages a growing sense of concern of educators with problems of the multiply handicapped blind.

Table 7

Comparisons of Grade Distributions of Blind Students and Total Enrollment in the U.S.

	Grade Level													
	K	1	2	3	4	5	6	7	8	9	10	11	12	Ung.
Total U.S.-1958	.05	.10	.10	.09	.09	.09	.09	.08	.07	.07	.07	.06	.04	
Blind-1960	.07	.15	.11	.10	.08	.08	.07	.07	.05	.05	.04	.03	.03	.06
Blind-1963	.03	.09	.09	.11	.11	.09	.08	.07	.06	.06	.05	.04	.04	.08
Blind-1966	.03	.07	.07	.07	.08	.08	.09	.09	.08	.07	.05	.05	.04	.12

The previous reports have compared grade distributions and reading mode for the total group of blind students and for groups of braille and print readers. With the exception of the ungraded category, the proportions of students within grades has remained stable from year to year. Between 1960 and 1963, the proportion of braille readers who were classed as ungraded increased from .06 to .09 while that for large type readers remained stable at .06. During the period 1963-66, the proportions of ungraded braille readers increased from .09 to .13 and those for large type readers from .06 to .10. These increases are approximately equal.

Fifty percent increase in children classified as ungraded

When comparisons are made between 1963 and 1966 for proportions grouped by grades and school systems, it is found that little difference is evident. However, a fifty percent increase in proportion of children classified as ungraded occurred in both local and residential schools with the former increasing from .06 to .09 and the latter increasing from .08 to .13.

Summary of Changes: 1963-1966

1. The total number of legally blind students registered with the American Printing House in 1966 was 19,007. This represented an increase of 1,897 over the number enrolled in 1963.
2. Of this total, 10,835 were enrolled in local day school programs, 6,886 were enrolled in residential schools for the blind, 663 enrolled in educational programs coordinated by state commissions for the blind, and 268 were enrolled in residential programs for the multiply handicapped (principally mentally retarded and deaf-blind).
3. It appeared that during this period local school enrollments increased about fifteen percent while those of residential schools remained static. However, because of changes in the reporting system, these data are only approximations.
4. Forty-six percent of legally blind children was reported as reading braille in 1966 as compared to fifty-three percent in 1963. Thirty-six percent of the group was reported reading large type in 1966 as compared to forty-three percent in 1963. Eleven percent of the group was reported as utilizing regular ink print materials to some extent. Again, the clarity of the data are obscured by changes in the reporting system.

5. There appeared to be a consistent trend in all school systems toward greater use of residual vision. School systems appear to be characterized by emphasis on a particular type of medium which for residential schools is braille, for local schools is large type, and for programs coordinated by commissions is regular ink print. These emphases do not necessarily reflect the visual attributes of the population served.
6. The number of legally blind students classified as ungraded in 1966 was 2,324. This represents an increase of almost fifty percent over the number so reported in 1963 and an increase of one hundred percent in the number so reported in 1960.

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Unmet Needs Of Deaf-Blind Children

ANNETTE DINSMORE

Miss Dinsmore is a specialist for deaf-blind persons at the American Foundation for the Blind in New York City.

Over the last twenty years, deaf-blind children have been brought to the attention of and registered with the American Foundation for the Blind in ever increasing numbers. In 1947 we had fewer than 150 on register, while in 1967 there are 500, with at least a hundred more in process. Not only has case finding improved, but the information submitted has become more reliable, though there is still much to be desired in accuracy of reporting. With the impact of recent rubella epidemics, the number of deaf-blind children in this country may be multiplied alarmingly—to an extent which cannot possibly be estimated now. There is no formula which can give us the answer, although attempts have been made along this line.

Deaf-blind cannot be stereotyped

A deaf-blind child is not the stereotype of Helen Keller drawn by many people based upon literature and the recent drama *The Miracle Worker*. Neither does a deaf-blind child who is functioning on a retarded level necessarily turn out to be mentally defective, even though he may have been labeled as such in haste by some of our professional specialists.

Need for recognition of not only general characteristics of deaf-blind but also individual differences

There is a need for all of us to recognize not only the general characteristics of deaf-blind children but also the individual differences. There are widely varying degrees of visual and auditory impairments and combinations of these. Children also differ greatly in functional use of residual sight or residual hearing. One child may be able to develop visual and hearing efficiency, while another with approximately the same measurable losses may be totally unable to learn to identify what he sees or what he hears. In addition, there are widely varying factors in the child's early environment which affect his development.

Deaf-blind children fall into five general groups

It is necessary to know whether a deaf-blind child has ever had normal sight or hearing in order to understand his background of experience. The age at which each deficit became a serious handicap is significant in considering methods of training or education. With this thought in mind, deaf-blind children fall into five general groups. The child who has heard and seen until he is well started in school has a good foundation in speech and language and has a visual memory of his physical environment. The child who has been deaf from birth or infancy but who has had good sight during his first few years has a clear visual picture of the world around him but he may have poor speech or none, and his language is probably extremely limited.

The child who is born blind and loses hearing later has the advantage of having established firm patterns of language and speech. The child who has lost both sight and hearing from birth or early childhood faces the greatest barriers to learning speech, language, and in understanding his environment. Then there is the group of children who have partial losses in varying combinations, and in this group the age at which the handicaps occurred also must be considered in planning individual programs for them. When other physical handicaps are added to the impairments of sight and hearing the question of training and education becomes even more complex and methods must be adapted accordingly.

The Need For Counseling of Parents

☐ Perhaps the most serious unmet need today is the need for parent counseling—medical, psychological, and casework services to the parents. It is the physician's responsibility to make as early a diagnosis as possible and to give a frank interpretation to the parents in order to avoid endless, heartbreaking "shopping around."

The Syracuse University Program

☐ For ten years, the Foundation has been sponsoring a monthly four-day evaluation for deaf-blind children at the Center for Development of Blind Children at Syracuse University. This has proved valuable in individual cases, and also in building up a body of knowledge and experience which should help in establishing similar clinics elsewhere. The Syracuse team is presently in the process of preparing a manuscript which will give the details of conducting an evaluation and the methodology employed—a manuscript which should serve as a guide to other clinics. Obviously the number of deaf-blind children actually studied at Syracuse in any one year is a drop in the bucket in meeting the overall need, particularly in view of the increased number of rubella babies coming our way.

Edward Donlon, educational psychologist and the coordinator of the Syracuse evaluation program, describes it as follows:

Psycho-educational future of child of prime importance

> One parent or, ideally, both, accompany the child to Syracuse, together with a child-care worker from the local community. The child is examined by a pediatrician, neurologist, ophthalmologist, otologist, audiologist, psychologist, caseworker and educator. These specialists then participate in staff conferences along with the child-care worker from the child's home town. While necessarily there is a large proportion of medical personnel on the team, it is recognized by all that the psycho-educational future of the child is of prime importance. The various physical handicaps are seen in relation to this, and attempts are made to assess their effect on total child development.
>
> It is essential to portray the child as functioning in many ways. The auditory and visual efficiency is always of importance with these children. It is frequently noted that the child has some amount of sight or hearing that he is not using to full capacity. Physical growth also is significant as a factor in overall development and should be considered in drawing conclusions as to the child's total functional ability.

Psychological and physical levels must be assessed.

> In addition to this, it is important to assess various psychological and physical levels. Among these are the comprehension which a child has of his environment; his various areas of concept development; and his actual academic skills if such are in evidence. Language development and the ability to use this in communication are areas which can be measured by the speech and hearing specialist. We are concerned about these various skills and the ways the child uses them as he interacts in his environment. The means he employs for modifying and controlling his environment are significant as determinants of his future.

Program developed to direct child's future

> As part of the total evaluation it becomes necessary to outline a program which will be used to direct the child's future. A beginning formation of this program is made

between the staff of the Center and the worker who comes with the child's parents. Frequently, two plans are outlined—first, the ideal program which would be desirable if all necessary facilities could be brought into play, and—second, a modification of the first which would be possible to carry out under existing conditions. Various steps are recommended which the Center will follow up checking certain areas and suggesting changes when indicated.

Frequently the goals set by the evaluation team are at a lower level than those previously set by the parents. While these may be outlined quite specifically during the conference, there is always a problem in communication after the child leaves the Center. This is one of the reasons that a local caseworker is required to accompany the parents during the four-day session.

Aim at Syracuse is evaluation rather than diagnosis

It should be emphasized that the present aim at Syracuse is for *evaluation* which should be distinguished from *diagnosis*. Diagnosis implies labeling, and does not stress the many factors involved in a program that evaluates all areas of child development. Within this team approach an initial picture of the child's total functioning evolves. How to make use of this picture in predicting future functioning, and how to transmit it to the persons who will be working with the child are two of the major problems that arise. The ultimate goal is to enable the child to reach his fullest potential and to be as self-sufficient as possible in present day society.

Perkins School for the Blind Program

☐ Gertrude Stenquist, research worker, department for deaf-blind children, Perkins School for the Blind, Watertown, Massachusetts, describes the Perkins' evaluation program as follows:

Each child viewed diagnostically in terms of total functioning

The basic tenet of the evaluation program at Perkins is that each child must be viewed diagnostically in terms of his total functioning.

Before seeing the child, the evaluation team attempts to obtain a complete medical history, including pre-natal, natal, pediatric, neurological, otolaryngological, and ophthalmological information. Also, the family and developmental history are studied as well as all educational and psychological data which may be obtainable.

Goals of Perkins' Program

☐ Our goals include the determination of the following: type of auditory disorder (peripheral, central, psychogenic or due to mental deficiency); extent of hearing loss and visual loss; quality of motor function; nature and level of language ability; social responsiveness; level of intellectual functioning; type of problems presented; kind of program indicated.

Diagnosis of auditory disorder

Of basic importance in the diagnosis of the type of auditory disorder is the fact that the peripherally deaf child, the emotionally disturbed child, the centrally damaged child, and the mentally deficient child vary in their behavior not only toward sound but toward the world in general. The determination of the type of auditory problem, therefore, necessitates consideration of the child as revealed by the study of the history and by the observation and evaluation of his present behavior in many areas: auditory; motor; language; social; emotional; intellectual.

Determination of extent of visual and hearing loss

Pure tone audiometric testing is done whenever possible in the evaluation of hearing, but often, especially with very young children, informal tests with noisemakers must be used together with observations of such factors as the child's use and quality of vocalizations and his response to voice and environmental sounds. In our observation of vision and of visual behavior we are concerned mainly with whether the child is visually or tactually oriented and whether he should be educated with print or with braille materials.

Quality of motor function and language ability

In the assessment of motor capacity, we observe the child with reference to scales of motor development, or scales including motor items, such as those of Oseretsky, Doll and Gesell. Locomotion, balance, gait, laterality, grasp, and manipulative ability are all indicative of motor function or dysfunction. The child's inner, receptive, and expressive language is assessed by observation of his use of objects and toys in the environment, his receptivity to gesture and to speech and his own expressive use of gesture or speech. The majority of children whom we see for evaluation are non-verbal children and therefore the ways in which they play and their receptive and expressive non-verbal communication are revealing as to their language ability.

Level of intellectual functioning

In evaluating the level of intellectual functioning, we use selected, appropriate items, whenever possible, from tests such as the Cattell Tests for Infants and Young Children, the Revised Stanford-Binet Tests of Intelligence, and Ontario School Ability Examination for Deaf Children, the Nebraska Test of Learning Aptitude for Deaf Children, and others. Often these tests are of more value qualitatively than quantitatively, but results give some indication of the child's mental level, of his strengths and weaknesses, and of his educational potential.

Social responsiveness

With the child's parents as informants, an adaptation for visually handicapped children of the Vineland Social Maturity Scale is administered. Thus, knowledge is obtained concerning the child's social behavior, competence, and development, concerning the parents' feelings toward their child; and concerning the emotional environment and the experiential background in which the child has lived.

Conclusions and prognosis

On the basis of the history information, the behavioral observations and the test results, a differential diagnosis as to type of auditory disorder is made. Conclusions are drawn as to the nature and severity of the learning problems present and as to the prognosis in terms of educability. Recommendations are made concerning the type of program needed and the most beneficial placement for the child.

There is a need for all of us to pool our skills in medical and psychological evaluation, a need to coordinate findings and make recommendations consistent with a given child's abilities and disabilities. Casework services are urgently needed at the local level, to help implement the recommendations of the evaluation team and to give supportive help to parents. Case work services in the home are needed even more if there has been no opportunity for the child to be given a formal evaluation.

Urgent needs for deaf-blind children

☐ In 1959, the Foundation listed as two of the urgent needs for deaf-blind children: expansion of teacher preparation programs, and legislation in the various states to meet their financial obligations for out-of-state tuition, transportation, and evaluation services. These needs are still with us, but there has been some encouraging action taken recently.

Perkins School for the Blind has administered a teacher preparation program since 1956. This course has been given on a graduate level, first in cooperation with Boston University and later with Boston College. Starting in September, 1967, three additional colleges and universities are offering programs to prepare teachers of deaf-blind children. These are San Francisco State College, with a practicum at the California School for the Blind, deaf-blind department, Berkeley; George Peabody College for Teachers, Nashville, with a practicum at the Alabama Institute for the Deaf and Blind, deaf-blind department, Talladega; and Michigan State University, East Lansing, with a practicum at the Michigan

School for the Blind, deaf-blind department. These courses offer us the hope that, in some measure, educators will be able to meet the influx of rubella babies when they reach school age. In the meantime, of course, the need for services in the pre-school area is critical.

As far as legislation goes, one or more states each year have passed laws or made appropriations to pay out-of-state tuition. Some have included transportation but few indicate willingness to pay for evaluations. As far as we know, it has been impossible to implement such legislation in states where no deaf-blind child has been reported. The law makers seem to need a case in point.

Blind Persons as Social Workers and Rehabilitation Counselors

Blind individuals function successfully in the professions of social work and rehabilitation counseling if properly qualified and trained. Many blind persons have already demonstrated their ability to function as competent social workers and rehabilitation counselors.

Blind people are individuals. They have strengths, weaknesses, defenses and compensatory mechanisms as have all people. Old notions of all of the things blind people cannot do have been exploded by the blind person's many successes which required the same persistence, ingenuity, and diligence which contributed to the success of sighted persons. Authorities in the field of rehabilitation have succinctly said that blind persons have become effective and respected employees in the general pattern of the professions as well as in industry and commerce.

Persons who are blind suffer from the prejudices of a sighted population who have for years developed preconceived stereotyped ideas of what blind persons cannot do. Many sighted persons do not make a fair appraisal of the potential of blind persons.

Many sighted do not make fair appraisal of potential of blind persons

Persons who are blind have demonstrated that they can function effectively in many areas without the use of normal vision. The training of such persons is basically similar to the training of any person who comes into educational

This article was adapted from a statement of basic principles relating to the training and placement of blind persons as social workers and vocational rehabilitation counselors which was prepared by the Committee on the Employment of Blind Persons in the Professions of the New York State Federation of Workers for the Blind. Virginia McDonough, assistant director of the Commission for the Blind and Visually Handicapped, 15 Park Row, New York, New York 10038, was chairman of the committee. Anyone wishing copies of the report may obtain them from her at the Commission.

systems for training and for acquiring new skills, new ideas and new methods in preparation for the objective of employment. Just as each sighted person is helped to recognize and meet his individual needs, whatever they might be, so the blind person is assisted in orientation to the environment and equips himself with whatever aids are necessary to attain the objective.

Answers to Typical Questions Asked

☐ Q. Can a blind person do an effective job as a social worker or rehabilitation counselor?

A. A blind person can do an effective job in both of these professions. Prior to admission to a postgraduate school, he has prepared himself just as any qualified sighted person would do. He has also met the high standards of the specialized training he needs as an individual to cope with his handicap. In most instances, the state displays its confidence in blind persons by providing the counseling and financing of this training.

Can the blind meet eligibility requirements for graduate programs?

Q. Can blind students meet the eligibility requirements for graduate programs of social work or vocational rehabilitation?

A. Blind persons should be evaluated on an individual basis, in the same manner as all other students. It is necessary to consider carefully the meaning the blind person attaches to loss of sight and how this has contributed to his concept of self. He must have demonstrated a real adjustment to his blindness before he is able to help people with their individual problems.

Can the blind meet criteria of learning performance?

Q. Can the blind student meet the same criteria of learning performance as other students?

A. The blind student can meet the same criteria of learning performance as his sighted counterparts. It is true that he may have to learn through different media, but he can and does learn. His success depends as much on the attitude of the school and agency personnel as it does on his individual qualifications. The success of a blind student, as well as any student, in a school of social work or a program of vocational rehabilitation is strengthened by the skill of supervision in the field of placement. The supervisor should be able to individualize and to evaluate an applicant on the basis of his ability to learn, rather than to place emphasis on the physical disability.

The blind person is generally as well-organized as the sighted student. Just as his sighted colleague, he maintains appropriate agency case folders, case controls, resource files, literature, manuals of procedures, and related reading matter.

How the blind person communicates

Q. How does the blind person communicate?

A. Through the training and use of varied techniques, the professional blind person develops communication skills which enable him to function in a flexible manner to a high level of independence.

Reading is engaged in by blind persons, just as by sighted persons, through techniques which have been developed in the "reading process." Blind persons read by means of sighted readers, recording devices, braille, and in some instances, optical aids. The use of sighted readers to assist the blind person in schools and public and private agency employment is accepted both in principle and practice. A secretary who would normally be working with a professional worker, sighted or blind, could handle the necessary reading. If this service cannot be given, the blind person is responsible for employing a reader and making the necessary financial arrangements. The school or the employer, of course, has every right to interview the reader, especially with respect to judgment in processing confidential material.

The blind person usually has a recording machine, a braille writer, and a typewriter. There are also several other devices which enable the employee to complete printed forms and write script messages.

Effects of blindness on relationship with clients

Q. Does blindness affect relationships with clients?

A. It is to be expected that the visual handicap will create some reaction, verbalized or not, on the part of both the sighted and non-sighted client. Among the sighted there may be expressions of wonder at what the blind person can do or perhaps expressions of pity over his handicap.

Generally, the client who is involved in his own problems and desires a service does not have a lasting concern for the worker's handicap. The blind person must be able to discuss his blindness with ease if the client needs to have him do so.

The blindness itself may be a catalyst towards a quicker and better rapport with the client. There will be those occasions when the factor of blindness may present a barrier to quick rapport but the skill of the professional worker will overcome this, just as the skill of the sighted worker will overcome any difficulties that may arise between himself and the client because of erroneous first impressions on the part of the client.

How the blind person travels

Q. How will the blind person travel?

A. The blind person referred to a graduate school or for employment should be able to travel safely and effectively. Many blind persons have been sponsored by agencies which provide training techniques of travel. Once he has been oriented to the surroundings, the blind person will move about with little difficulty.

Conclusion

☐ A number of blind persons in the fields of social work and vocational rehabilitation have demonstrated their ability to serve as professional persons in all types of public and voluntary health, education and welfare agencies. Many schools of social work and vocational rehabilitation have developed increasing confidence in the qualified blind applicant and have accepted a limited number for admission. Many visually handicapped applicants are denied admission to these educational institutions solely on the basis of their handicap. This denial appears to place emphasis on the handicap rather than on the individual's professional qualifications and ability.

The shortage of social workers and rehabilitation counselors is a recognized fact. Opportunities for blind persons are increasing as the schools of social work and special education continue to develop more acceptable attitudes toward the disability of blindness. However, it is felt that additional opportunities should be made available for those blind persons who meet the necessary qualifications.

Report from Washington

Secretary John Gardner has announced a reorganization of the Department of Health, Education, and Welfare, under which three HEW agencies—Administration on Aging, Vocational Rehabilitation Administration, and Welfare Administration—are combined in a new agency called the Social and Rehabilitation Service. Miss Mary E. Switzer, formerly Commissioner of Vocational Rehabilitation, has been appointed head of the new agency with the title of administrator, while Joseph H. Meyers, formerly Deputy Commissioner of Welfare, will serve as deputy administrator for operations.

The new agency has five major subdivisions: Administration on Aging, Assistance Payments Administration, Children's Bureau, Medical Services Administration, and Rehabilitation Services Administration.

Responsibilities of the Rehabilitation Services Administration will be of particular interest to readers. In addition to assuming the functions of VRA and services for crippled children, the Rehabilitation Services Administration has been assigned social, rehabilitative, and preventive services for aid to the blind and aid to the permanently and totally disabled public assistance recipients formerly under the Bureau of Family Services of the Welfare Administration. The Division of Mental Retardation, which administers the program of grants for the construction and operation of mental retardation research centers and community facilities, has been transferred from the Bureau of Health Services of the Public Health Service to the new Rehabilitation Services Administration.

Social Security

On August 17, the U. S. House of Representatives passed H.R. 12080, the Social Security Amendments of 1967. It includes all the changes made by the committee in H.R. 5710, the Administration's Social Security bill, which it supersedes.

Of particular interest to readers is the increase in cash benefits for old age, survivors, and disability insurance beneficiaries under Title II of the Act; deferment of the Administration's recommendation of medicare coverage under Title XVIII for disability insurance beneficiaries and disabled child beneficiaries: and modification of the Administration's recommendation of cash benefits for disabled widows under age 62 to provide benefits for those aged 50 and over. No action was taken on H.R. 3064, the bill which would authorize disability insurance cash benefits for persons within the 20/200 definition of blindness who have at least six quarters of employment covered by Social Security.

As passed by the House of Representatives, the bill provides for the following:

1. Increase of 12½% in OASDI benefits with minimum raised to $50 a month and maximum to $159.80 a month for the retired worker.
2. Increase in the taxable wage base effective January 1, 1968 to $7,600 a year from the present $6,600.
3. Cash benefits for disabled widows and widowers between the ages of 50 and 62 at the rate of 50 percent of the primary insurance amount increasing gradually to 82 1/2 percent at age 62 and thereafter.
4. Restricted definition of disability for disabled widows, widowers, and surviving divorced wives precluding ability to engage in any gainful activity.
5. Inclusion of all disabled persons under age 31 within the definition of disability for cash benefits with a minimum of six quarters of covered employment.
6. Deferment of medicare coverage for disability insurance beneficiaries by requiring a study by a Special Advisory Council which must report by January 1, 1969.
7. Increase in number of covered hospital days under medicare from 90 days to 120 days in a spell of illness with patient required to pay $20 per day for the additional days.
8. Transfer of outpatient hospital diagnostic services from the hospital insurance program to the supplementary medical insurance program.
9. Transfer of child welfare services from Title V of the Social Security Act to Title IV with an increase in the authorization of appropriations from $55,000,000 to $100,000,000 for fiscal 1969.
10. A new program of grants to colleges and universities for four years beginning July 1, 1968 with authorization of appropriations of $5,000,000 per year to improve social work training with half of the appropriation to be used for undergraduate training annually.
11. Increased authorization of appropriations for public assistance demonstration projects to $4,000,000 a year with the program to be made permanent.
12. Improvements in maternal and child health and crippled children's programs through consolidation and increases in authorization of appropriations.

Details of Senate action will be covered in a later issue.

Vocational Rehabilitation

On August 18, 19, and 20, the Select Subcommittee on Education of the House Committee on Education and Labor held hearings on H.R. 8981, the Vocational Rehabilitation Amendments of 1967. This Administration bill provides for the following:

1. Extension of the authorization of appropriations for grants to the states for vocational rehabilitation services to $500,000,000 for fiscal 1969 and $600,000,000 for fiscal 1970.

2. Extension for an additional year of the authorization for grants to the states for comprehensive rehabilitation planning.

3. Establishment of a program of pilot and demonstration projects for the vocational rehabilitation of migrant workers and their families.

4. Prohibition of residence requirements as a criterion of eligibility for vocational rehabilitation services.

5. Establishment and operation of the National Center for Deaf-Blind Youths and Adults.

AFB's Washington representative, Irvin P. Schloss, filed a statement in support of the legislation on behalf of AFB, AAIB, AAWB, and BVA. Also testifying in support of the bill in addition to Administration witnesses were Dr. Peter J. Salmon and Robert Smithdas, both of the Industrial Home for the Blind of Brooklyn, and John F. Nagle of the National Federation of the Blind.

On August 15, the Committee on Education and Labor reported H.R. 12257, a "clean" bill incorporating changes made by the committee in H.R. 8981. This bill was passed by the House of Representatives on August 21. Among the changes, largely technical in nature, were elimination of a restriction on actual appropriations for vocational rehabilitation services and of authority to the Secretary to plan for additional regional centers for the rehabilitation of deaf-blind youths and adults.

Legislation providing for similar centers for deaf-blind children was expected to be introduced momentarily at presstime around the end of August.

On August 14, Miss Mary Switzer for the Department of HEW and Messrs. Nagle, Salmon, Smithdas, and Schloss appeared before the Subcommittee on Health of the Senate Committee on Labor and Public Welfare in support of S. 1618, a companion bill to H.R. 8981. Senator Lister Hill (D., Ala.), who is chairman of both the Subcommittee and the full Committee, introduced S. 1618. I.P.S.

News in Brief

■ Dennis L. Holmes has been named director of educational services of the Virginia Commission for the Visually Handicapped. Mr. Holmes, who formerly taught at the Iowa Braille and Sight Saving School, received a B.A. degree from the State College of Iowa and has done work for a masters in education administration at the same school.

■ William Feldman has joined the American Foundation for the Blind as director of the personnel and training service in the program development division. In this position, Mr. Feldman will conduct a nationwide program of recruitment of professional and administrative personnel and maintain a clearing house of current job vacancies for state and local agencies. He will also coordinate training programs for the purpose of raising the level of professional competence in the field of services for blind persons.

Prior to joining AFB, he was director of social services in the National Travelers Aid Association of America. He is a member of the bar of the State of New Jersey, the National Association of Social Workers and the Academy of Certified Social Workers.

■ Plans for reorganization of the National Institute of Mental Health's National Clearinghouse for Mental Health Information have been announced by Dr. Stanley F. Yolles, director of the institute. The reorganization plans include expansion of information services and publication activities and the placing of new emphasis on the ways and means of increasing and improving scientific communication in the fields of mental illness and mental health.

Dr. Lorraine Bouthilet, who has been serving as administrative chief of the clearinghouse, has been appointed scientific director.

■ The U.S. Vocational Rehabilitation Administration has approved a grant to Pennhurst State School and Hospital in Spring City, Pennsylvania, for development of an evaluation unit for the mentally retarded patients who have a visual handicap. The project—believed to be the first of its kind in the nation—will be co-sponsored by the Pennsylvania Department of Public Welfare office for the blind and office of mental retardation.

The purpose of the program, according to Dr. Donald H. Jolly, Pennsylvania commissioner of mental retardation, "is to provide new and expanded services for those institutionalized mentally retarded patients who have the further handicapping and catastrophic disability of blindness in varying degrees."

The budget for the first year of the three-year project will be $65,701. The federal share will be 90 percent or $59,131, and the state share $6,570. Dr. Leopold A. Potkonski, superintendent of Pennhurst, will be project director, and M. Harris Schaeffer, director of the institution's psychosensory habilitation services, co-director. Referral of visually handicapped persons within the institution will be made by George Zerr, supervisor of vision services.

■ Norman Subotnik has been appointed chief of the public information service of the Vocational Rehabilitation Administration of the U.S. Department of Health, Education, and Welfare. Prior to joining

VRA, Mr. Subotnik had been, since 1961, director of public relations for the Associated Jewish Charities of Baltimore.

■ Dr. A. P. Jarrell, assistant Georgia state superintendent of schools and director of the state Office of Vocational Rehabilitation, died in August after a long illness. Dr. Jarrell, who won many awards for his work in the field of rehabilitation, was president of the National Rehabilitation Association in 1964.

■ Irvin P. Schloss has been elected national president of the Blinded Veterans Association. Mr. Schloss, who has been Washington representative of the American Foundation for the Blind since 1958, was from 1954 to 1958 executive director of the BVA. Julius D. Morris, a lawyer and member of the Connecticut state legislature, was elected national vice presidnt.

Other national officers elected at the August annual convention in Hartford, Connecticut were Simon Gerbush, national secretary; Clyde W. Waugh, national treasurer; Reverend Thomas J. Carroll, national chaplain; and James H. Butler, national sergeant-at-arms.

■ Dr. Jessie Royer Greaves, founder and principal of the Royer-Greaves School for Blind in Paoli, Pennsylvania, died June 21 at the age of 92. Dr. Royer Greaves, who began her career in work for the blind as a teacher of declamation and physical expression at the Overbook School for the Blind in Philadelphia, founded the Royer-Greaves School for Blind in 1921 in Stafford, Pennsylvania. It was the first school established for retarded blind children alone.

■ Japan's first safety bridge designed especially for the blind, part of a three-year government plan to alleviate Japan's serious traffic problems, was opened recently in Nagano City. When a person approaches the bridge, a tape recorder automatically announces its existence, and instructions, including directions and turnings, are inscribed in braille on the surface of the handrail.

■ The National Accreditation Council for Agencies Serving the Blind and Visually Handicapped has announced that The COMSTAC Report: *Standards for Strengthened Services,* has been taped and is available on five seven-inch reels at a price of $16.25. This edition was produced by and can be ordered from the Sacramento Society for the Blind, 1415 Twenty-Seventh Street, Sacramento, California 95816.

■ Hunter College has announced the appointment of Joan B. Chase as an assistant professor in the department of education. Miss Chase has been assigned to the graduate program in special education where she will teach methods courses for teachers of the visually handicapped and courses in the psychology and learning problems of the handicapped.

■ David M. Courtman has joined the National Society for the Prevention of Blindness, Inc. as director of national development. Most recently, Mr. Courtman was director of financial development with Cancer Care, Inc. of the National Cancer Foundation for seven years.

■ Kenneth Jernigan, director of the Iowa Commission for the Blind, received the second annual Francis Joseph Campbell citation and medal given by the American Library Association's Round Table on Library Service for the Blind at the ALA's annual meeting in San Francisco. Mr. Jernigan was cited for "his imaginative and constructive leadership" in establishing the Iowa Library for the Blind.

The citation is named for Sir Francis Joseph Campbell, founder of the Royal Normal College and Academy of Music in London. He was a leader in the education of blind persons during the latter half of the nineteenth century.

■ Tapes of dramas recently recorded for the magnetic tape collection of the Library of Congress by the Elbee Audio Players of New York, an independent group of amateur, blind reporatory players, are now available. The plays already on tape are "All about Eve," by Joseph L. Mankiewicz; "A Majority of One," by Leonard Spiegelglass; "Come Blow Your Horn," by Neil Simon; and "Dear Me. The Sky is Falling, by Leonard Spiegelglass. Thornton Wilder's "Our Town," and Paddy Chayefsky's "Marty" will be recorded shortly.

These drama tapes may be obtained from regional libraries or from The Library of Congress, Division for the Blind, 1291 Taylor Street, N.W. Washington, D.C. 20542.

■ Maps in braille will be tested by blind students from the Maryland School for the Blind in Baltimore, the Overlook School in Philadelphia, Syracuse University, and the Maryland Workshop for the Blind in Baltimore during a two-year research project to be conducted by the University of Maryland under a grant received from the Vocational Rehabilitation Administration of the U.S. Department of Health, Education, and Welfare.

The mobility maps, which were developed during a pilot project sponsored by VRA at the University of Maryland last year, are made from three different production processes and will be evaluated for clarity and ease of reading.

Coming Events

October 1-5 National Rehabilitation Association Annual Conference, Cleveland, Ohio

October 15-19 National Industries for the Blind, Washington, D.C.

October 23-27 American Public Health Association, Miami Beach, Florida

October 30-November 3 American Academy of Ophthalmologists, Chicago, Illinois

December 6-9 American Public Welfare Association, Biennial Round Table, Washington, D.C.

Letters to the Editor

Dear Editor:

I should like to comment on Mr. Hapeman's article "The Ultra Sonic Aid for the Blind" published in the May issue of the *New Outlook.*

I completely agree with the author that a firm grasp of basic mobility techniques is an essential prerequisite before trying to use the Sonic Aid. I also experienced the same problem of the feeling of loss of physical contact when using this device. Also, unless one can use other clues, detection of step-downs is difficult, if not impossible. The use of a known and obvious symbol to warn the public also creates problems.

However, if the ear piece is suitably revised so that adequate device-to-ear coupling is provided, then the problem of sound masking and distraction is so greatly alleviated as to become negligible. Also I found that the ability to explore one's "cultural geography," to use Mr. Hapeman's apt expression, seems to me to be of far more importance in orientation and guidance than is indicated by the author. Actually this type of exploration served to solve many of the very problems for which sighted assistance is often required, thus partially off-setting the lack of the cane symbol.

The foregoing remarks should not be interpreted as meaning that I am yet convinced that the Sonic Aid should be considered as a substitute for the cane, but there does seem to be sufficient favorable evidence to warrant much more field work before any judgments are formed.

Yours sincerely,
J. Swail
Instrument Section
National Research Council
Ottawa, Canada

Dear Editor:

Mr. Haj's article, "On Intermarriage Among the Blind" (May, 1967), was a fine piece of research and was intriguing. I should like to pass on some of my own observations, for whatever they might be worth—not professional observations, to be sure, merely those of an individual with something of an obsessive pre-occupation with why people act that way, the blind in particular.

First, I wonder if Mr. Haj didn't overlook one large causative factor in these intermarriages among the blind, namely, its higher incidence in *urban* areas. Living in a large city, where there is a higher concentration of blind persons and agencies serving them, tends to segregate the blind, whether or not they have attended a residential school. . . The small, rural community, on the other hand, forces a kind of "integration" on its blind people, for if there should happen to be more than one in a community, there is usually such a disparity of age and interests among them that there is little basis for the kind of segregated association the city blind know. The rural blind, therefore, will either remain single, find sighted mates or (generally with men) seek "mail-order" brides.

I have known many of these "blind marriages," and it's my feeling that relatively few of them go on the rocks. Of the ones I know which have not lasted, all were in large cities, and if either of the partners remarried, it has been to someone who was blind or legally blind. . .

I would say there are more marriage of blind men with sighted women than the opposite. I would say from my observation in many of these cases I know that it's not so much anything attractive in the blind man as a psychological need in the woman—the need to be *needed.* The sighted men I know who take blind mates tend to fall into two main classifications: the wonderful, thoughtful, tender man, often of superior intellect, whom *any* girl could call herself thrice blessed to call hers; and the bullying type, who, while not physically abusive (and some I know have even gone that far), seem to enjoy being able to lord it over a girl to whom they can feel superior. When a marriage with this latter type lasts, the girl is generally of a submissive, colorless character.

One more thing: the bit about the mail-order brides. I have long been aware of the near-panic that seizes many blind men about their singleness, and often results, if they live in rural communities or for some other reason have little chance to meet girls, in their starting almost immediately to write love-letters to the first feminine penpal who starts the salutation of her braille letters with "dear." (I have had a number of such, including some outright proposals). If they happen to find a girl in the same frame of mind, as some do, the result is wedding bells soon.

Sincerely,
(Miss) Mary Walton
Topeka, Kansas

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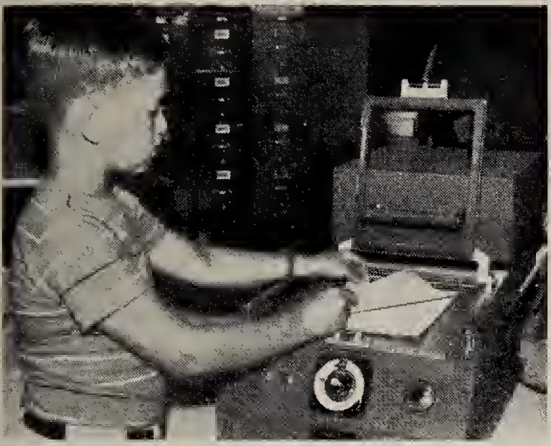

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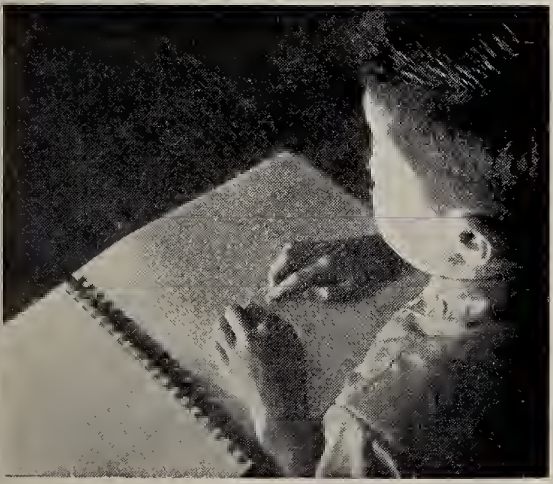

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E. B. Whitten

Challenges and Opportunities Under the Randolph-Sheppard Act
Dr. Douglas C. MacFarland

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Editor-in-Chief
M. Robert Barnett

Managing Editor
Patricia Scherf Smith

Assistant Editor
Mary Ellen Mulholland

Manpower for Rehabilitation

E. B. WHITTEN

Mr. Whitten is executive director of the National Rehabilitation Association.

Every thoughtful person recognizes that the effectiveness of a rehabilitation program depends upon the people who work in the program. They recognize that such workers should understand the philosophy and purposes of rehabilitation in general and of their own programs in particular; understand the needs of handicapped people who are being served; be able to relate effectively to these people; be familiar with the methods and techniques that have been found helpful in assisting handicapped people in their rehabilitation; and have the ability to practice these techniques with reasonable efficiency.

In order for these conditions to exist, there must be some agreement with respect to what rehabilitation workers should know. There must be some organized body of knowledge that can be imparted to individuals in whatever learning situations are provided. Some system through which individuals may acquire the knowledge must be devised. The accepted procedure is to set up college and university programs to educate people for the task we have tried to define. Eventually, a cadre of people who have a fairly common background of education and professional experience develops, and these people organize themselves into professions.

When one speaks of manpower needs in rehabilitation, or welfare, or health, or education, one is usually referring to what might be called the established professions; that is, those that have been in existence for a long time and with respect to which there is some agreement as to the training needs and the work they should be doing. Most of these disciplines have an association or associations who certify as to the competence of individuals in the profession, even pinning emblems on their sleeves to indicate such competencies. They recommend curricula for the training of members; develop codes of ethics governing relationships of their workers with their clientele, other workers, and the general public; study the needs for additional professional workers of their kind; and, usually, issue alarming reports about shortages in their fields. In some instances, while issuing cries of alarm, they hold down the number of practitioners in their field by unrealistic educational standards. These organizations also recruit individuals into their field and, frequently, offer placement services to help them get adjusted.

Determining Potential Needs for Professional Workers

☐ If one wants to know how many social workers there are practicing in the United States, how many are currently being educated, how many jobs are available, and what the potential need for them will be, this information can be got from the National Association of Social Workers or the National Council on Social Work Education. How accurate such information is, particularly in the projection of needs for such workers, may be questionable. These organizations, however, probably know as much or more about the need than anyone else does, so their estimates are largely uncontested by the public. What I have said about social workers can also be said about physicians, psychologists, counselors, teachers, occupational therapists, physical therapists, speech and hearing pathologists, nurses, and almost any other group that practices in the general field of rehabilitation.

Another approach to determining the need for various types of professional workers is to approach the agencies who hire such workers to ascertain their estimates of their own needs for personnel. Almost always, the estimates given by these organizations will be less than the estimates which the professionals give of the need for people in their own professions. This discrepancy probably stems from the fact that the agencies are thinking not only in terms of optimal needs, or desires, but about the amount of money they are going to have to hire such workers and whether their boards will permit the establishment of positions, even if funds are available. Although the estimates of professional organizations and estimates of hiring agencies may differ, both groups of agencies agree that the needs are probably far greater than can be met with current personnel or with the personnel which reasonably may be expected in the years immediately ahead. All of us know that there are substantial funds available from the federal government and/or the state governments to assist colleges and universities in training people for almost all of these established professions. The Congress of the United States has been exceedingly liberal in the appropriation of funds for this purpose. This practice is to be encouraged, and I am sure that all of us agree that we want to see more and better trained workers in the older professions.

New Jobs in Rehabilitation and Related Fields

Work evaluators in workshops and rehabilitation centers

☐ At the same time, there are other less publicized personnel needs. There are a number of "new" jobs in rehabilitation and related fields. Workers in these new or underdeveloped professions do not usually have organizations to represent them. They do not have established curricula to train the members of their group. They may lack essentially all of the aspects which go to make up a profession, as a profession generally describes itself, yet they play a vital role in rehabilitation. One is the work evaluator in the workshop or rehabilitation center. This is the individual working with handicapped people to help them evaluate their work potential. The same person may also have responsibility for helping the individual make the adjustments needed for success in a world of work. There must be 2,000 or more individuals who are performing this task in the workshops and rehabilitation centers of the country. This job grew up almost accidentally to meet a need which was not being met by the established professions. In some cases, people with psychological training were taught industrial skills and became evaluators. In other cases, people with industrial know-how were taught certain psychological skills, and they became the evaluators. In a few instances, occupational therapists became the evaluators, although this was a radical departure from the traditional practice of occupational therapy. There are other combinations.

Production managers in workshops

A second group of individuals who have become very important in rehabilitation are the production managers in workshops. Again, since we have over 1,000 workshops in the country, we must have two or three thousand persons who are practicing in this general field. Although I am not sure anyone can substantiate it, I think it is assumed that most of these people have had some kind of industrial experience to qualify them for their jobs. It is an oversimplification, however, for one to assume that understanding production techniques is enough to enable an individual to succeed in performing this responsibility in a rehabilitation setting. So far as I know, little or nothing has been done to identify the total scope of knowledge and skills such individuals should have, much less develop training programs for them.

Administrators of rehabilitation facilities and workshops

Another group of individuals for whom there is substantial need are administrators of rehabilitation facilities and workshops. Several thousand people hold such positions, yet very little has been done to identify the unique aspects of this position. We say this with due regard to the fact that there have been a few short-term training institutes for such people. Other professional workers needed in smaller numbers include rehabilitation specialists in state vocational rehabilitation agencies, public health agencies, and other agencies having responsibility for rehabilitation facility development; also research specialists for rehabilitation agencies, individuals who should be able to keep one foot in research, the other in rehabilitation practice, aiming to try to bring knowledge and practice together.

In more specialized fields, there are many other "new" positions. One for which there is great need is mobility instructors in programs for the blind. Undoubtedly, many other jobs could be added to the list of these "new" jobs.

Rehabilitation counseling moving from a "new" to an established profession

One group of workers in the country moving rapidly into the ranks of established professionals are rehabilitation counselors. In 1954 only two colleges or universities offered training on a systematic basis to such individuals. With federal assistance, the Vocational Rehabilitation Administration now has rehabilitation counselor education programs in *over seventy* institutions. Four thousand or more such individuals are members of the rehabilitation counseling division of the National Rehabilitation Association. This organization and a companion division of the American Personnel and Guidance Association are attempting to do for the rehabilitation counseling profession what has been done much earlier for other professions in the rehabilitation field.

"New" jobs must be studied carefully

The principal point I want to make with respect to the new groups of workers is that it is equally important to consider these individuals, when we consider personnel needs in rehabilitation programs. These jobs need to be studied carefully and more precisely defined. The knowledges and skills to do the work need to be identified much more carefully than has been done already, and training programs, both institutional and in service, should be developed to help individuals master the required knowledge and skill.

VRA Training Programs

☐ It is in this connection, that I think it appropriate to say something about the Vocational Rehabilitation Administration training programs. One of the most admirable aspects of these programs has been VRA's willingness to pioneer in the training of rehabilitation workers for whom there have not previously been systematic training programs. I have already mentioned what has been done to systematize training for vocational rehabilitation counselors. It is significant that VRA is providing assistance to colleges and universities to begin training for work evaluators, rehabilitation facility and workshop administrators, and general program administrators in rehabilitation. It would have been unfortunate, indeed, if the Vocational Rehabilitation Administration had taken the position that the already well-established professions could meet all the needs of handicapped people and had confined their assistance to such groups. This does not mean that VRA has neglected the established professions. It is providing assistance in the inculcation of rehabilitation principles and practices and providing student stipends in schools of social work, medicine, psychology, occupational therapy, physical therapy, speech and hearing pathology, etc.

VRA program's flexibility important

The flexibility of the VRA program is also very important. It has assisted the older professions, while helping the new professions develop. It has emphasized institutional training while at the same time providing substantial assistance for in-service training. It has encouraged long-term training of professional workers, while recognizing the practical necessity for short-term training. It is this flexibility which has been the unique and most valuable characteristic of the Vocational Rehabilitation Administration's training programs, and we hope this flexibility will continue to be a feature in the administration of its training programs.

You may have been surprised that I have talked about personnel needs in rehabilitation without giving you a long string of figures on how many social workers are needed; how many physical medicine rehabilitationists are available and how many are needed; how many counselors there are and how many are needed; how many speech and hearing pathologists we have and how many are needed, and on and on. As indicated, it is simple enough for you to get estimates of such figures from the professional organizations in these fields.

Manpower Needs in the Future

☐ As I contemplate manpower needs in the future and try to determine how the problems of recruitment can be solved, a number of points come to mind. In the first place, we will have to continue to step up our formal training of professional workers in the established fields. This means more physicians, psychologists, social workers, counselors, therapists, etc. At the same time, hopefully, we shall be introducing rehabilitation philosophy and practices into their curricula so that these individuals can make their maximum contribution to helping handicapped people meet their needs.

In the second place, we will have to define positions in the newer professions much more carefully and concentrate on developing the kind of curricula that will result in effective training of individuals to perform these tasks. This is no simple undertaking.

Increasing effectiveness of recruiting methods

Third, we will have to increase the effectiveness of our recruiting methods. NRA has a recruitment and placement program which, while it centers on rehabilitation counseling, is by no means confined to it. In setting up our program, we found out as much as we could about the recruitment and placement programs conducted by other agencies. With respect to recruitment, we were surprised at how little we could find out. Many national organizations operate recruitment programs. Some of them are modest programs, expending relatively small amounts of money. Others are large and costly. As far as we can tell, no one organization feels that it has been able to identify recruitment methods that could be shown to be truly effective. The field seems to be in the kind of flux that a candidate is in running for an office. He really does not seem to know what it is that causes people to vote for him or against him; so he uses television as much as he can afford, goes on radio whenever he can, purchases advertisements in newspapers, puts his picture on telephone poles, plays all of the "inside" politics he can, and prays that something will work. This seems to be more or less the situation as regards recruitment for the helping professions.

Have our recruitment efforts missed the boat entirely?

Some people have said that we have missed the boat entirely in our recruitment. Most of it has been concentrated at the graduate level, which has meant, we are told, that we have done very little to increase the supply of individuals who are entering the helping professions. Instead, we have competed avidly with each other to get the relatively few people who are training for the helping professions. I think we can agree that the public benefits very little when a director of a rehabilitation agency is able to recruit the three best social workers in the public welfare department. Nor does the public gain very much when a rehabilitation center is able to hire the best rehabilitation counselors in a state agency. Nor is it very important to the public whether the school of social work or the school of rehabilitation counseling wins the competition to have the college graduate enter a professional training program. I think that these critics of our recruitment programs make a very good case. It seems to me that we are going to have to concentrate on getting young people to decide they want to enter the helping professions. Then, when the total supply of potential professional workers is increased, we can compete to see who is going to get them with a better conscience.

Making better use of trained personnel

We also have to make better use of our trained personnel. It has become stylish to say this in recent years, and I am sure you expected me to say this. Even in nursing, which is certainly one of the well established professions, there is a tremendous difference in the duties that a nurse will perform in one hospital as contrasted to another hospital. In one instance, she may be the only individual who is allowed to maintain any substantial meaningful contact with the patient, excepting the doctor, and as anyone who has been hospitalized recently certainly knows, the patient sees very little of the doctor. In some hospitals, no one except the nurse herself is permitted to carry the sleeping pill to the bedside of the patient. In others, the nurse becomes a supervisor of practical nurses and orderlies and other workers, the confidante and assistant to the physician, etc. There are hospitals where both extremes are practiced.

We are kidding ourselves, if we think that we are going to have in our lifetimes enough trained people in the established professions to do everything which has traditionally been considered the responsibility of these people. Fortunately, many of the things they have traditionally done can be done just as well by someone else with less professional training. We all know this, but we practice it very slowly. This principle applies to all of the professions in rehabilitation from medicine to rehabilitation counseling. One of the greatest challenges in the rehabilitation movement is to take the practical steps that are needed to break professional jobs down, identify the component parts, decide which parts of these jobs require specific types of training, and utilize our people at their higher skills. Siginificantly, we have made some beginning in this, both at the academic level and at the practice level. I would like to see a tremendous amount of work in this field.

In recent years many people have painted the rehabilitation personnel picture in such pessimistic terms that it seems to be a problem which simply cannot be solved. In my judgment, this is not so. To get the people that are going to be needed to provide services to handicapped people is not an impossible task. It is merely a different problem, one requiring the best thought that we are able to produce and the most intelligent efforts to implement the decisions we make with respect to how the job must be done. Finally, if we remember that the excuse for the existence of all of us, without regard to our job titles or professional training, is to try to help a handicapped individual achieve more effectively his individual goals for living, we will find many ways to do this. If we have to shed a little of our professionalism to do it, both the handicapped individual and we ourselves may be better for it.

Filling the Needs of the Deaf Blind — An Acrostic

Through this acrostic spelling deaf blind, Dr. James F. Garrett, assistant administrator of Research and Demonstrations in the Social and Rehabilitation Service, has neatly summarized the needs of this too often forgotten part of our population.

D *Detail,* painstaking
E *Effort,* by both client and staff
A *Adjustment,* the goal for the client and required of staff
F *Facilities,* a myriad of them needed for success

B *Belongingness,* all of us want and the deaf-blind seldom have felt
L *Language,* or communication skill, fundamental to their rehabilitation
I *Individuality,* each person differs in so many ways from others
N *Numbers,* thank goodness, small
D *Diversity,* of needs, of ways of meeting them, of personnel and resources needed for rehabilitation

Challenges and Opportunities Under the Randolph-Sheppard Act

DR. DOUGLAS C. MACFARLAND

Dr. MacFarland is chief of the Division of Services for the Blind in the Social and Rehabilitation Service of the U.S. Department of Health, Education, and Welfare.

There are many problems in the vending stand program which must be solved within the next few years. Problems which need immediate attention are maximum employment for all blind persons who can profit from vending stands available; providing the best possible service for our customers; and making certain that blind persons we serve are receiving their fair share of the profits accruing to the vending stand program.

Firm statistics for fiscal 1967 are not yet available, but information on hand indicates that the gross volume of business will be well in excess of $70 million. The average return to operators also increased. Less spectacular, however, was the increase in the number of stands and new operators. A long time ago we learned that the greatest potential growth in the vending stand program was in private enterprise, and for the last ten years the number of stands outside federal properties has more than doubled those on federal properties. This is a great tribute to those who manage the vending stand programs throughout the country and certainly indicates that our program can be very competitive when necessary. Competition within the past five years, however, has become so fierce both within and outside government installations that we must take a hard introspective look at our program if we expect to hold our gains and increase them in the coming years.

Areas Where the Program is Deficient

☐ Let me point out a few spots in which I think we are deficient. These may not apply to many individual programs, but they certainly are factors in the national picture. Even in stands operating at what some consider top efficiency, there is room for improvement.

Maintenance and replacement of equipment

Maintenance and replacement of equipment—by this we do not mean waiting until a piece of equipment is completely worn out before it is replaced. Modern design and engineering is moving so rapidly that some equipment is obsolete even before it is off the drawing board. I am not thinking of gadgetry, but simply of keeping abreast with the modern trends in equipment. The customers have a right to demand the best and they will not hesitate to take their patronage elsewhere if they feel they are being shortchanged.

The use of machines

In thinking about modernizing equipment, we cannot ignore the use of machines. Hopefully, in most instances this can be done in conjunction with manual feeding operations. However, we must recognize that in certain locations feeding is essential twenty-four hours a day, and the number of customers on the second and third shift may not support full operator service. Operator service has always been discussed in great detail, but it is a subject that bears repeating—for I find as we visit locations throughout the country that sometimes lip service can be substituted for customer service. We think it can be put into very simple terms: Every stand, small or large, should be clean, efficiently operated, well stocked, and, most of all, customer oriented.

While it is true that a major part of our responsibility is to find employment for capable blind workers, the emphasis must be on capability, and we have an equal responsibility to make certain the customers are satisfied. This brings me to the third consideration which is the real mainspring of our effort and will determine in the next few years whether the vending stand program will attain its potential growth or die on the vine.

Training of operators

This is the subject of training of operators. We in rehabilitation have accepted the principle of training and recognize its value in almost every field except the vending stand program. We do not hesitate to give the two years of training necessary to prepare a blind person for the repairing of small gasoline motors. We provide a year of training in a secretarial school to prepare a person for medical transcription work. However, in the vending stand program, training ranges from a few days to a few months and seldom encompasses a structured curriculum or paid full-time instructors. When we compare the average earnings of vending stand operators with the average earnings of other employment opportunities for the blind, either sub-professional or professional, we begin to understand the fallacy of our current operational procedures.

By "training of operators" I do not mean what we usually term "adjustment training" although this is absolutely essential and again is being overlooked in many areas of the country. If adjustment training is necessary for any job, it certainly is imperative for the vending stand program. The individual must be completely mobile, not only traveling to his place of business, but able to move about the stand with complete freedom. Good grooming certainly must be stressed in the adjustment training. A solid grounding in the communication skills, not just a smattering of braille where braille is necessary, but some basic understanding of how to use this tool for notetaking and for recordkeeping should always be given to the prospective stand operator.

Obviously, these things fall within the definition of adjustment training and should be given to every blind person before he is considered for vocational training. This training cannot be substituted for vocational training specifically geared to vending stand operators. Programs must be devised throughout the nation, not only for the training, but for the retraining and continual upgrading of operators already in the program. Such training programs should include, at a minimum, instruction in merchandizing, ordering of stock, recordkeeping as required, customer relationships, how to accept good supervision, self-help, and self-improvement. (These are just a few ideas, not any attempt to structure the curriculum.) Training should extend over a period of at least six months, perhaps a year. To some, this may come as a shock, but if we are to fill the many opportunities available to us, we must get down to the serious business of adequate preparation of operators.

Increase in Competition

☐ In spite of the excellent financial opportunities for blind persons in the vending stand business, competition here, too, is becoming very keen. Employment opportunities for the blind are increasing at a very rapid rate, and it is no longer necessary for a blind person to enter the vending stand program to ensure a good livelihood. We are, therefore, faced with the practical solution of taking a good look at applicants with lesser abilities and training them in depth. The Vocational Rehabilitation Amendments have made it possible to give vocational evaluation and diagnosis for a period of eighteen months, and two years of training, for multi-handicapped blind persons entering the field of workshop employment. If this is accepted practice, why should extensive training for vending stand operators, whose potential earning power is much greater, be any different?

In many parts of the country, it will be necessary to train on a regional or even bi-regional basis, although some states are large enough to support their own training institutions. However it is accomplished, it must be done. These training courses should have been in operation years ago.

The Randolph-Sheppard Act is not only a great opportunity for blind persons, but it also is extremely important to our entire Vocational Rehabilition program. It has often been referred to as "The Showcase of the Blind," and as such it is imperative for us to keep the image high. The new Vocational Rehabilitation Amendments of 1965 contain all the components to do the job that is necessary. We certainly hope that you will take advantage of them.

Proposals for Amendation of the Randolph-Sheppard Act

☐ I would also like to discuss some new legislation that has been proposed to amend the Randolph-Sheppard Act. There are many persons who feel that revisions are in order, as the act has not been changed since the passage of P. L. 565 in 1954. I am not going to discuss specific proposals but merely point up some of the changes recommended in pieces of legislation. These are matters for serious consideration not only from the standpoint of administration of state programs, but also from the standpoint of benefits which should accrue to vending stand operators.

Presidential board suggested

One amendment raises the issue of the need for a Presidential Board, three man appointed by the President, to adjudicate disputes between the state licensing agencies and the federal agencies regarding the installation and operation of vending stand locations in federal buildings and on federal properties. One of the difficulties in presenting this proposal is that in spite of an appeals mechanism, which was set up by the Bureau of the Budget a few years ago, we have had very few appeals at the national level. Most of them have been settled amicably from the standpoint of both sides. The real difficulty arises not from whether a state licensing agency has the right to operate in a federal building or on a federal property, but how far this right extends and when should it be permitted to interfere with employee welfare groups. This matter perhaps should be more easily settled through definition of a vending stand rather than by a Presidential Board. Certainly, any proposal purporting to amend the Randolph-Sheppard Act will have to come to grips with the definition of a vending stand. Some of the questions which will be raised and which we must resolve are:

Need for definition of a vending stand

(1) Should large cafeterias and dining rooms be considered vending stands?
(2) What foods can be prepared and dispensed at a vending stand?

(3) Should swing rooms or work rooms in post offices be considered reasonable space for the installation of vending stands under the Randolph-Sheppard Act?

(4) We must reach more equitable conclusions with respect to the division of vending stand income:

Division of vending stand income

(a) A sharper definition that will describe "in close proximity to and direct competition with the vending stand."

(b) What distribution should be made of other vending machine income in the same building with a vending stand?

(c) Whether the vending stand program should share in any profits in a building where there are vending machines installed but no vending stand operators.

(d) A proportionate distribution of vending machine income for the operators for program purposes, and for assuring a fair minimum return to other operators.

(5) Amendments should consider the setting aside of funds and the four purposes for which they may be set aside. Perhaps the original purposes should be altered and strengthened in light of new Vocational Rehabilitation Amendments which provide additional monies for management and supervision.

(6) Although it is difficult to present a concept of multi-operators in any new amendments, some thought should be given to the idea of providing more equitable work opportunities for capable blind persons in the program.

(7) There is a great need for deciding on a legal basis the ratio of blind and sighted persons who work in a vending stand. We recognize that in many instances sight is required, but we feel that the program would be more understandable to the public if some reasonable percentage could be spelled out. In writing the definition, the primary purpose of the program should be borne in mind so that the blind will have substantial opportunities in the preferential locations provided by the Randolph-Sheppard Act.

(8) Most legislative proposals contain a provision for fair hearing. This is redundant since the Vocational Rehabilitation Amendments make mandatory fair hearings for any vocational rehabilitation client dissatisfied with services received. Obviously, we concur in the fair hearing procedure, but there are a number of factors which must be spelled out in any legislation:

(a) Who should be authorized to conduct the hearing and render a decision?

Fair hearing procedures must be spelled out

(b) Should the decision of the chosen body be final and binding?

(c) There should be some broad regulations as to what constitutes a grievance necessitating a fair hearing in order to permit proper management and supervision.

Some of these legislative proposals are so restrictive that any attempt at supervision could be construed as a basis for requesting a fair hearing. If management is to play a real part in this program, supervisory practices must be spelled out and must be given some recognition on in the amendments.

I have managed to present numerous problems but few solutions. At HEW

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A Developmental Approach to Psychological Factors Which May Inhibit Mobility in the Visually Handicapped Person

EDOUARD L. WILSON

Mr. Wilson is supervisor of psychological testing and counseling services at the New York Association for the Blind.

Readiness to undertake mobility training is often difficult to assess because of the vast number of variables which can and do influence human personality. In addition to the psychological factors, there are many social factors that must be understood prior to embarking upon mobility training. It has been said, and I believe accurately so, that blindness is a "social handicap" as well as a physical handicap. Visual perception is the broad-based learning channel that is utilized by all sighted people to conceptualize, orient, adapt, adjust, and integrate environmental and life experiences in order to locomote and navigate successfully in the performance of daily living skills. Loss or reduction of visual acuity blocks this essential learning channel so that development of other sensory mechanisms is a prime goal in mobility rehabilitation in order to attempt to effectuate independence in locomotion. Independent locomotion should lead to successful integration into the environment and thereby reduce ineffectiveness to meeting daily needs.

In congenital blindness, there is no loss of vision for it never existed, so there is a need for early manipulation and stimulation of other sensory mechanisms to provide growth experiences which may lead to mobility mastery at an early age. Essentially, our social structure is group-oriented. We live, learn, work, recreate, and socialize in groups. Effective group performance leads to healthy emotional adjustment; ineffective group adjustment leads to unhealthy emotional adjustment. Blindness creates ineffective group performance due to incapacities in locomotion, inability to perceive facial expressions, blocking of the capacity to observe group interaction, and diminishing of cues which aid in exhibiting spontaneity in physical movement so that the very act of entering into mobility training does and can create anxiety. Brenner states in *An Elementary Textbook of Psychoanalysis* that when the ego (the self) opposes the emergence of an id (primitive) impulse, it does so because it judges that the emergence of that impulse will create a danger situation. The ego then produces anxiety as a signal of danger which the person uses as a means of avoiding harm.

Normal Maturation

☐ The ability to navigate and ambulate successfully as a human being in an upright position is a highly complex process which is a culmination of an intricate and delicate development of the neuromotor and muscular system of the human infant. It takes the average human infant sixty weeks or fifteen months of physical, emotional, and social maturation before attainment of independent walking becomes a reality. For at least a half-year, the infant is virtually immobile and is reduced to assuming a prone position. Before upright posture is acquired, the infant exhibits a number of primitive and abortive modes of locomotion such as rolling, pivoting, forward crawl, backward crawl, regression, rocking, creep-crawling, and finally, cruising. The very diversity of these prewalking activities testifies to the complexity of the process of developmental patterning. It must also be understood that some of the patterns have a recapitulatory suggestion; however, they may be regarded as functional expressions of transient but necessary stages in the organization of the neuromotor system.

In 1927, Monahan and Hollingsworth, in a study of gifted children, found that the gifted child was appreciably superior in neuromuscular capacity which was measured by strength of grip, jumping, and tapping speed. This superior development also had a decided effect upon social and emotional development so that we may infer that with blind children this will also be a variable to consider in understanding readiness for locomotion and ultimately mastering the technique of independent travel. In other words, the level of intellectual functioning does help to determine the early readiness of neuromuscular development which could effect mobility. It must be stressed, however, that environmental stimulation may play a major role in the proper development and/or retarded or accelerated development of the native ability.

Maturation in Blind Children

☐ Congenitally blind children are seldom able to proceed developmentally along the same lines as a fully sighted normal child. Learning experiences blocked by lack of sight reduce their spatial volume, perceptual, and orientation knowledge. Therefore, the blind child experiences difficulties in perceiving what the upright physical position is like and generally he develops little interest in movement through walking. Primarily, the child feels secure only when held, fondled, supported, or talked to. The natural curiosity of exploring the furniture, doors, windows, etc., in a home is thwarted and improper exposure can and does produce fears. These fears may cause irreparable emotional trauma if not handled properly.

Much of fear in blind children is parental fear

Much of the fear in blind children is parental fear communicated to the child. This fear reduces his self-confidence. In addition, his blindness causes physical weaknesses due to inaction, thereby lowering his capacity for successful mastery of daily tasks which also creates fear. It must also be borne in mind that not only is the blindness debilitating, but it also fosters psychological problems such as parental overprotection and interference with the normal development of independence and self-help. Thus, the growing child's ideas about himself and his self-worth can indirectly have a bearing on his anxieties and fears.

In 1946, Boutovier and Henri found that the fears of the blind were aggravated by their difficulty in visually imagining and identifying noises. Their fear of loud noises was aggravated by the fact that such noises mask feebler sound on which they depend for spatial orientation. They were also subject to shock when suddenly touching something without the visual forewarning a normal person would have.

As the blind child grows and brings his blindness under control, the fears and anxieties of childhood may disappear into the unconscious as he gains more and more personal and social adequacy. Because these fears disappear, it does not mean that they cannot be recalled at a later date when the person is faced with a stressful situation. At certain times, such as learning mobility, the person may regress due to fear of not being able to negotiate mobility, trigger the dormant fears of childhood, and become highly resistant to learning.

Case Histories—Resistance to Learning Mobility

☐ For example, let's examine two cases of resistance in learning mobility, one a congenitally blind young person, and the other an adventitiously blinded person. First, however, I feel it is important to examine the differences in adjustment which must be made by the congenitally blind person and the person who becomes adventitiously blinded. The congenitally blind person needs to learn how to organize sensory perceptions within a framework of auditory and tactual interaction. The adventitiously blind person has to attempt to integrate his remaining sensory mechanisms within the previously structured framework of visual images which may be recalled and used in making an adequate orientation to his environment. Now, back to our cases:

Case One—A Congenitally Blind Person

☐ N., an eighteen-year-old, congenitally blind young woman, related in a hostile, sarcastic, and cynical manner when she first came for rehabilitation. She was assessed as having superior intelligence but was functioning within the bright normal range due to emotional problems. Part of the personality picture from the psychological report read: "N. is an impetuous, guarded, worried, insecure adolescent who feels unloved, unwanted, and rejected by her family. She also resents the fact that she was born blind and her twin sister was not.

In her thinking, when she is in an unstructured setting, N. tends to become overabstract and pedantic. Emotionally, she is flat, bland, and unyielding. Interpersonal relationships of an ordered kind irritate her so that she will snap back at others with caustic, negativistic, cutting, and impudent remarks. Her fantasy life is rich and sometimes extreme, but there was evidence that she has never hallucinated. This girl's ego is intact, but her self-image is a disturbed one."

The first six months in rehabilitation were trying ones, and N. made virtually no progress. She had dropped out of high school and was unable to travel independently. She initially entered group therapy and later individual therapy. Now, let us examine her status in mobility:

February 9, 1966—Mobility was evaluated indoors and outdoors, and she indicated a need for extended training. Progress was slow, concentration poor, and this had a negative effect on her orientation and cane travel techniques.

March 23, 1966—The mobility instructor reported that N. had a poor sense of balance, lack of concentration, and easily became disoriented. Also, it was questionable at this stage of training whether she would ever become a fully independent traveler. However, supportive counseling enabled her to make enough progress to return to school in September of 1966, and to enter individual psychotherapy.

December 13, 1966—Client had progressed to training on public transportation involving subway travel. On November 29th, N. traveled from the agency to her home via subway independently. She has shown great strides in her attitude and motivation toward mobility. It is quite possible that much of this has been accomplished through therapy sessions.

March 1, 1967—N. is a pleasant, alert, punctual client. She is interested in and well-motivated for mobility. Follows verbal directions well, has good comprehension of the basics of orientation and of cane technique.

May 5, 1967—Her use of hearing was often vague, especially in areas with complex sound clues. Her moods were not consistent, but she was always pleasant and cooperative. At times, she was most impatient with herself and her performance, but once having gained self-confidence, she performed very adequately. N. grasped concepts very well but due to her lack of self-confidence, she demanded much repetition of instruction and supportive practice. Client handled herself indoors with poise and ease. She was able to travel well outdoors and appeared to grasp the concepts of intersections, blocks, and parallel streets. She was oriented to the bus route from her school to the agency and performed this task well. Client is quite well-oriented to her general environment and is able to travel independently in some situations.

By June 1, 1967, the report read: "N. persisted in her feelings of 'being obvious and watched' while using the cane, but to a much less intense degree than formerly. She followed verbal instructions and directions well and was quite rapid in accepting and understanding them. N. has progressed in her mobility training and is traveling more often and more independently."

The story with N. has not ended; however, she has demonstrated in her performance that the poor self-image, inability to effectively handle hostility, jealousy of the sighted, over suspiciousness, and fears can be successfully worked through in therapy so that the hopelessness she demonstrated in learning to master mobility has remissed. She is now well on her way to becoming an independent person for the first time in her life.

Case Two—An Adventitiously Blinded Person

☐ C., an adventitiously blinded young woman of thirty-eight, entered the rehabilitation center in a very cooperative manner. The psychologist who tested her noted: "C. achieved a rating of bright normal on the verbal section of the Wechsler Adult Intelligence Scale. She was highly motivated and anxious to please, but anxiety seemed to hinder her associations and productivity. She was tense, hostile, and suspicious with much masculine protest apparent in her thinking and behavior. She possessed useful tunnel vision."

On October 18, 1966, the mobility instructor wrote: "C. appears quite tense but, in recent lessons, has made efforts to be cooperative. She displays an intelligent comprehension for following routes. C. has the potential to become an excellent cane traveler. The main problem with this client is her acceptance of the cane. She has trouble using her residual vision (tunnel) in either dim or glaring light and fears travel at night."

On December 9, 1966, the report read: "Her anxiety and complete non-adjustment to her blindness has prevented her from satisfactorily using the techniques taught her in cane travel. It was felt that the emotional impact was very intense and mobility instruction should be discontinued until after she had undergone individual therapy."

C. entered individual therapy on March 6, 1967. Meanwhile, mobility instruction was discontinued; however, later she did enter transcription typing training. C. responded well to therapy and as soon as she had begun to feel secure in the therapeutic relationship, she actively tried to work through her emotional problems. On June 19, 1967, C. summed up her insights in this manner: I took a few days off and I did a lot of thinking. I understood what you have been telling me. I was being blind. The vision I have I don't use. So, instead of using what I don't have, I am going to use what I have. That goes with cane travel too. I can learn the cane without being blindfolded. I will use my eyes." C. went on to say that she would use a cane even if it was not stylish because she now recognized her real need. It had taken some emotional strength for C. to progress to this level, thereby making it possible for her resistance to learning cane travel to yield. She had also associated the cane with masculinity and continuously verbalized her hate for men because of her long-time separation from her husband. Rejection of the cane had a direct bearing on C.'s rejection of men. At this time, she is far less hostile toward men and, with the removal of this hostility, has come the acceptance of the cane despite the fact that it is a masculine phallic symbol.

C. has re-entered mobility training and it is prognosticated that she will do well since she is now accepting her visual limitations and needs realistically.

It may also be pointed out that N., the congenitally blind young woman, had become resistant not only to learning mobility, but to learning in general. To her, learning was symbolic of severing the umbilical cord which she felt ill-prepared to do. Also, she revealed in therapy that during her childhood, she had experienced many traumatic learning episodes due to parental over-cautiousness and inability to understand what her actual learning potential was. She knew that she could successfully master certain tasks such as riding a tricycle or walking along her home block, but her parents constantly fostered fear, insecurity, and anxiety in her because of her inability to perceive as quickly as her sighted twin. Thus, over the years, she developed many deep-seated dependency needs which she used as a compensatory reaction to her blindness.

Reactions to Immobility

☐ Psychological problems result when a blind person is made homebound due to his inability to locomote successfully. Reactions to immobility vary with the intellectual, emotional, interpersonal, and social ability of the person. In addition, family concern, which runs from crippling overprotectiveness to outright rejection, can aid or precipitate deep-seated emotional needs that foster in the person feelings of hopelessness, helplessness, hostility, and dread of the outside world. As a reaction to familial emotional support or non-support, the person learns to defend himself against further threats of being hurt in the following ways:

1. The immobile person will manipulate others to satisfy his needs, thereby protecting and fostering extreme dependency.
2. The person will reject constructive help because rejection of such help aids him in the overt denial of the existence of the handicap.
3. He will block all efforts towards learning mobility and then blame his

inability to learn upon his family, hospital, rehabilitation agency, mobility instructor, or any individual or situation to which he has been exposed.

4. He may become anxious due to the restrictions placed upon him by his environment, physical limitations, and range of emotional experiences.

5. He may become depressed due to feelings of helplessness, hopelessness, inadequacy, and inferiority.

6. The person may also become angry and hostile because of imagined or experienced social rejection and the isolation due to his immobility.

7. He many times becomes worried, fearing the future and general failure.

8. He may also become tense because of the inability to express his feelings in a healthy, self-gratifying manner.

9. He may become aggressive because of a need to react to the basic passiveness he feels because of inaction.

10. He may become manic because of a need to cover-up how he really feels about being shut in.

Reaching the immobile person

Failure to develop a sense of being, worthiness, and personal adequacy reduces self-esteem and restricts the development of an adequate set of defenses to help the person face the daily frustration of being restricted to the home environment. Therefore, it is important to note that the introduction of mobility instruction has to be carefully timed and planned by an expert who has been trained to cope with the diversity of emotional problems which may interfere with it. The following recommendations are made as an initial step toward reaching the immobile person:

1. It must be recognized that the person has been living in virtual isolation. The mobility instructor should try to help to relieve some of the feelings of abandonment. Care should be exercised not to raise the person's hopes unrealistically, and the person should be encouraged to make the best use of his remaining senses.

2. It is important to recognize that the client may be afraid of the future as well as of failure in learning how to successfully locomote. Such fears may be alleviated by using minimal achievements as a first goal so that the person gradually may become desensitized to the fears.

3. Each client should be treated as an individual and the mobility instructor should make an effort to help the client to adjust to his blindness.

4. It is essential to learn what is important to the client in order to develop an interesting and challenging mobility program for him.

5. If the mobility instructor goes into the home of the client, he should make sure that he understands the cultural values and customs of the home so as to not subject the client to tasks which may be viewed as unrealistic.

6. While executing all of the aforestated, the mobility instructor should be building the relationship with the client, for when the relationship has been cemented between the mobility instructor and the client, it notates that the client trusts the judgment of the mobility instructor, indicating that he feels secure enough to attempt to learn how to master situations that were once fear-producing.

Mobility and the aged blind

☐ The *Encyclopedia Britannica* states that the total number of blind people in the world in the 1960's was fourteen million. A very large percentage of these blind people have become adventitiously blinded due to old age. It must be borne in mind also that while modern medicine has helped to control and in some cases arrest disease progression, it has not been able to control the side effects which in many cases is blindness.

In the normal aging process, various sensory abilities decline in acuity. The aged see and hear less. Decreased elasticity of the lens develops into farsightedness. Eating provides less sensory stimulation and the olfactory and gustatory senses become increasingly weaker. In addition, the tactile sense depreciates as the skin dries out and hardens.

Because motor skills deteriorate among the aged in reverse order of acquisition, the most delicately balanced coordinations which are the latest to be developed decrease first and the earlier acquired grosser motor activities follow. The same decline in memory occurs so that the older person may not be able to recall recently learned material, but can go into detail about some happening which occurred in his youth.

Aging in the various abilities and skills can be and is usually a differential process. Skills which are not used remain underdeveloped as there is a decline in the skill due to non-use. During the aging process, perceptual skills which depend primarily on the sense receptors decline first and most rapidly. Motor skills and intellectual functions usually follow. Since many of the aged are also adventitiously blinded, the teaching of mobility has a triple threat to overcome: decreased learning ability, decreased sensory acuity in the other senses, and decreased motor functioning due to aging.

Conclusion

☐ In this paper, I have tried to speak about some of the psychological factors which may inhibit mobility in the visually handicapped person by examing the developmental process which starts in childhood and ends with old age. The complexity of the subject and wide variations in personality, physical, and psychological development has necessarily limited the amount of coverage that this paper could successfully undertake; however, I hope that it will spark and spur on further individual exploration into this new and interesting discipline in the field of blindness.

It is important to recognize that mobility represents the avenue through which a person who is born blind or becomes blind at a later age, reaches out into his social, educational, vocational, and economic environment. Without mobility, successful integration into the community and independent functioning are blocked. Independent functioning on the part of the blind person gains the person community acceptance. There are many psychological factors which may prevent a person from successfully undertaking mobility through expert therapeutic and mobility handling. The caseworker, counselor, and psychologist may be able to break through the resistances through knowledge and understanding of the developmental process; however, it is the mobility instructor who must use this expertise in teaching the client. To teach mobility is a massive undertaking because it is a mechanical technique which has been

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The Blind Population: 1967—1977

JOHN W. FERREE, M.D.

Dr. Ferree is executive director of the National Society for the Prevention of Blindness.

What will the size of the blind population be in 1977? What will its characteristics be? These are extremely difficult questions to answer. Even today we do not know a great deal about this population. There are no actual figures—only rough estimates based on limited data available from a few state registers and some studies of special population groups. The Model Reporting Area for Blindness Statistics of the National Institute for Neurological Diseases and Blindness is producing figures for a limited segment of the country. Eventually this area, as it continues to grow and the data it produces improves in quality, will provide the kind of information we need—accurate data for a representative population—as a basis for reliable estimates for the nation as a whole.

My assignment of predicting what the blind population will be like ten years hence—in 1977—as a basis for planning manpower needs is a large order. We really do not know what will happen in the next ten years which may affect the prevalence and, more importantly and significantly, the incidence of blindness. Will our programs of public education designed to promote good eye care and prevent needless blindness have an observable effect on trends? What effect will the results of present research into blinding eye diseases have? What new research will be undertaken in this period? What new or present causes of blindness will rise in importance in the years to come? (Hopefully there will be no recurrence of something like the retrolental fibroplasia incident.) These are questions which are impossible to answer and in most instances even to speculate upon with any degree of certainty.

The National Society's estimates for 1960 show a total of 385,000 legally blind persons with 30,250 persons becoming blind during the year. These are based on estimated rates of 214.0 per 100,000 population for prevalence and 16.8 per 100,000 for new cases. The estimated prevalence rate is that derived by Hurlin according to a formula with which I'm sure you are all familiar. The new case rate was computed according to a similar procedure. An explanation of these procedures is given in the recently published *NSPB Fact Book—Estimated Statistics on Blindness and Vision Problems.*

I refer to "legal" blindness, although this term may not be appropriate for all agencies or all states, to distinguish blindness as generally defined in this country—distant visual acuity of 20/200 or less in the better eye after correction or, if better than 20/200, with a limitation in the peripheral field of twenty degrees or less in the widest diameter.

No revisions of these rates have been made or are planned until population figures from the 1970 census are available. For current estimates the 1960

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rates were used. These give a total of 421,250 cases in 1966, an increase of 36,250 legally blind in the six-year period, and 33,050 new cases of legal blindness for 1966, an increase of 2,800 new cases occurring in that year over the number of new cases occurring in the year 1960.

No appreciable change in prevalence and new case rates

The best assumption we can make for 1977 is that there will be no appreciable change in prevalence and new case rates; they will be the same as at present.

However, based on these rates and population projections for 1977, we could expect a total of 497,000 cases of legal blindness and 39,090 new cases, increases of about 18 percent over 1966 in both the total number of cases and the number of new cases. These undoubtedly are conservative estimates. It is unlikely that there will be any tremendous increase in either rate unless some unpredictable event occurs. As for previous periods it can be anticipated that the increase in the number of blind persons will be due to the increase in the size of the population in this country, rather than to any increase in rates.

Changes in the proportion of aged persons will have effect

Changes in the proportion of aged persons in the population will have their effect on the blind population. It is in this age group, sixty-five years and over, that about one-half of the blind population is to be found and this proportion will undoubtedly increase with the predicted increase in the percent age of these persons in the population.

With all that we are now doing in eye research and prevention activities, it seems unlikely that there can be any great increase in blindness rates. More probably there will be a leveling off or hopefully a turn downward.

A distribution of total cases of blindness *by age* can be projected on the basis of our latest estimates which are those for 1962. Some differences can be expected for which adjustments can be made, for example, the movement of the "wave" of RLF cases out of the under twenty and into the twenty-to-thirty-nine-age group, and an expected influence of the trend in new cases on prevalence between now and 1977.

The estimated distribution by age for 1977 shows an increase in the proportion of legally blind persons sixty-five years of age and over—fifty percent

TABLE 1

Estimated Distribution of Total Cases of Blindness by Age, in 1962 and Projections for 1977 (Percent and Rate per 100,000 Population)

Age Group	*1962* *Per Cent*	*Rate*	*1977* *Per Cent*	*Rate*
Under 20	9.8	54.1	9.5	52.2
20-64	43.0	176.2	40.8	169.2
20-39	13.5	112.7	13.7	103.4
40-64	29.5	237.5	27.1	248.7
65 & Over	47.2	1,098.1	49.7	1,123.9
65-69	8.9	546.2	8.4	532.6
70 & Over	38.3	1,437.0	41.3	1,449.8
TOTAL	100.0	214.0	100.0	214.2
Total Number	399,300		497,900	

as compared with forty-seven percent for 1962. On the other hand the twenty to sixty-four age group shows a decrease in the proportion of total cases—from 43 percent in 1962 to 41 percent in 1977. The under-twenty age group remains about the same with approximately ten percent of all cases. (Table 1)

We cannot predict what changes might take place in the occurrence of new cases of blindness by 1977. Therefore, the 1962 rates were used to derive an estimated distribution by age for this year.

Predictions show 53 percent of the new cases to be sixty-five years of age or over; 33 percent in the productive years (twenty to sixty-four) and 14 percent under twenty years of age. With the greater survival rate of infants, especially prematures, and the increase in incidence of blindness due to prenatal influence (i.e. hereditary conditions or congenital, that is, those present at birth) estimates indicate a substantial increase in the *rate* of occurrence of new cases of blindness for the under-twenty age group in the last twenty years—from 1.9 per 100,000 in 1940 to 6.0 in 1962. The projection for 1977, of 5.9 per 100,000 population for this age group, represents no further increase in this rate.

TABLE 2

Estimated Distribution of New Cases of Blindness
by Age, in 1962 and Projections for 1977
(Percent and Rate per 100,000 Population)

Age Group	*1962* *Per Cent*	*Rate*	*1977* *Per Cent*	*Rate*
Under 20	13.6	6.0	13.7	5.9
20-64	36.0	11.6	33.3	10.8
20-39	7.7	5.0	8.4	5.0
40-64	28.3	17.9	24.9	17.9
65 & Over	50.4	92.0	53.0	94.0
65-69	8.9	42.9	8.6	42.9
70 & Over	41.5	122.1	44.4	122.1
TOTAL	100.00	16.8	100.0	16.8
Total Number	31,350		39,090	

What will be the major causes of blindness in 1977? Here again, this is something which is difficult to predict. I am sure all of the present causes will still be with us. What importance will be attached to each one is unknown. Also unknown are new causes which may assume roles of significance.

On the assumption that the distribution of prevalence estimates for 1977 by cause will be essentially as in 1962 with slight adjustments, a projected distribution by cause was derived. (Table 3)

1977 Estimates Show Some Changes in Rates for Specific Diseases

☐ While the total prevalence rate remains constant, the 1977 estimates show some changes in rates for specific diseases as compared with 1962. There are sizable decreases in the rate of blindness for several major cause categories: infectious diseases, 20 percent (from 11.2 cases per 100,000 population in 1962 to 9.0 in 1977); injuries, 14 percent (from 6.3 to 5.4); and poisonings, which includes RLF, 11 percent (from 7.4 to 6.6).

TABLE 3

Estimated Distribution of Total Cases of Blindness by Cause, in 1962 and Projections for 1977
(Per Cent and Rate per 100,000 Population)

	1962		1977	
Cause	*Per Cent*	*Rate*	*Per Cent*	*Rate*
Infectious Diseases	5.2	11.2	4.2	9.0
Ophthalmia Neonatorum	0.3	0.6	0.2	0.4
Syphilis	2.1	4.5	1.8	3.8
Other	2.8	6.1	2.2	4.8
Injuries	2.9	6.3	2.5	5.4
Poisonings	3.5	7.4	3.1	6.6
Retrolental Fibroplasia	3.2	6.8	2.7	5.8
Other	0.3	0.6	0.4	0.8
Neoplasms	1.4	3.1	1.6	3.3
General Diseases	20.4	43.6	21.7	46.5
Diabetes	11.2	24.0	12.3	26.3
Vascular	7.6	16.2	8.0	17.1
Other	1.6	3.4	1.4	3.1
Prenatal Influence	16.7	35.6	17.8	38.1
Unknown to Science	38.0	81.4	37.9	81.3
Glaucoma	13.5	28.9	13.7	29.4
Senile Cataract	15.6	33.4	14.8	31.7
Myopia	4.3	9.3	4.0	8.5
Other	4.6	9.8	5.4	11.7
Undetermined and Not Specified	11.9	25.4	11.2	24.0
TOTAL	100.00	214.0	100.0	214.2
Total Number	399,300		497,900	

General diseases and prenatal influence show rate increases

Two categories show rate increases of 7 percent: general diseases (from 43.6 to 46.5 per 100,000) and prenatal influence (from 35.6 to 38.1). The significant causes of blindness in the general disease category are diabetes and vascular disease. Each has higher prevalence rates in 1977—the diabetes rate of 26.3 is higher by 10 percent than in 1962 and that for vascular disease of 17.1 by 6 percent.

Another major category—unknown to [medical] science—shows no appreciable change in its rate of approximately 81 per 100,000. Two important ocular affections are in this cause category—glaucoma which had an increase in rate of 2 percent and senile cataract with a 5 percent rise. Prevalence rates for these two affections in 1977 are estimated to be 29.4 and 31.7 respectively.

The prevalence of blindness projections for 1977 indicate that the group of conditions due to prenatal influence (congenital malformations, retinal degeneration, retinitis pigmentosa) is still responsible for the largest proportion of all cases (17.8 percent as compared with 16.7 percent in 1962). Also, according to these estimates, senile cataract, glaucoma, and diabetes are the leading causes of blindness accounting, respectively, for 14.8, 13.7, and 12.3 percent of all cases. The order is the same as current estimates; however, the proportions estimated for these three major causes are closer together in 1977.

No change is assumed for the distributions of new cases of blindness by cause in 1977. As in 1962 these estimates show glaucoma and diabetes each occurring at about the same rate of 2.4 cases per 100,000 population with a rate of 2.3 for senile cataract. In terms of percentages glaucoma has a slight edge, being responsible for 14.5 percent of the new cases with diabetes accounting for 14.3 percent. Senile cataract is in third place with 13.7 percent of the new cases. (Table 4)

TABLE 4

Estimated Distribution of New Cases of Blindness by Cause,
Projections for 1977
(Percent and Rate per 100,000 Population)

Cause	*Per Cent*	1977**	*Rate*
Infectious Diseases	2.2		0.4
Ophthalmia Neonatorum	ø		*
Syphilis	1.1		0.2
Other	1.1		0.2
Injuries	1.9		0.3
Poisonings	0.5		0.1
Retrolental Fibroplasia	0.1		ø
Other	0.4		ø
Neoplasms	1.7		0.3
General Diseases	24.7		4.1
Diabetes	14.3		2.4
Vascular	8.9		1.5
Other	1.5		0.2
Prenatal Influence	20.2		3.4
Unknown to Science	38.8		6.5
Glaucoma	14.5		2.4
Senile Cataract	13.7		2.3
Myopia	3.3		0.6
Other	7.3		1.2
Undetermined and Not Specified	10.0		1.7
TOTAL	100.00		16.8
Total Number		39,090	

* Less than 0.01
ø Less than 0.1
** Same as 1962 (Total Number in 1962—31,350)

Factors Which Might Result in Unpredictable Changes

☐ What are the factors which might result in unpredictable changes in the age and cause distributions of the blind population as well as prevalence and incidence?

Growth of nation's population

The number of blind persons will undoubtedly continue to rise along with the growth of the nation's population. Increases forecast for greater proportions of the population in the under-five, twenty-to-thirty-nine and sixty-five and over age groups may result in greater proportions of blind persons in these age groups. However, unless some unforeseen event occurs, it is not expected that the rates will increase appreciably.

With the aging of the population, there has been a corresponding increase in blindness due to causes more prevalent among older persons—glaucoma, senile cataract, diabetes, vascular disease.

Early detection of existing conditions

Continued emphasis on early detection of persons with glaucoma and good control of known cases should effect a reduction in the incidence of blindness due to this cause. Further research in the next ten years should lead to more knowledge about this disease, perhaps more reliable screening procedures. Certainly education of the public to the need of good eye care and early detection should be paying off.

Senile cataract, according to eminent ophthalmologists, should not be an important cause of blindness. The success surgery enjoys today could eliminate much of the blindness from this cause if it were only more widely accepted. Hopefully, blindness due to it will also see a reduction in the next ten years.

Increased educational programs to alert the public to early detection and adequate control of diabetes may also produce a reduction in this cause.

Prenatal influences

Blindness due to prenatal influence—that is, conditions which are genetic in origin or due to unknown prenatal influences—is a most important problem which needs to be dealt with. Greater emphasis on genetic counseling is needed to prevent, hopefully, the birth of children who will almost certainly be visually impaired. Further research is also needed to learn cause and effect relationships for the many conditions in thie category so that effective prevention and control programs can be planned. This area is one of the big challenges of the future.

Infectious diseases and injuries as causes of blindness have continued to decline. The incidence of such cases may have reached the irreducible minimum. However, we must always be alert to potential increases in these causes.

With the measles-vaccine program, this cause, while not too significant numerically, should be virtually eliminated as have been diphtheria, smallpox, and the venereal diseases. More work needs to be done on the prevention of blindness due to trachoma in certain indigenous areas. Toxoplasmosis is another disease which needs to be watched as transmission of the disease in utero may result in visual impairment in the child.

Results of the recent rubella epidemic are still largely unknown. Unfortunately reports on children who are severely visually impaired, whatever the cause, do not reach agencies for the blind until the child is of school age. Will this result in a new "wave" of blind children such as that experienced with retrolental fibroplasia? Some experts think that this is what will be seen in the near future. If such is the case, then school facilities and special services will be taxed for several years to come. We do not have the answer now.

Injuries are not highly significant as causes of legal blindness since both eyes must be severely affected to fit this category. Most often only one eye is affected or both are less severely impaired. Legislative controls and educational programs must be continued to prevent any increase here. We must be ever alert to any attempts to change present legislation for control of the sale and use of fireworks. Also more needs to be done to curtail the use of BB guns and other so-called toy weapons, such as bows and arrows and slingshots.

We cannot foresee any new eye conditions which may assume importance as causes of blindness in the years to come. Hopefully there will be no recurrence

(Continued on page 308)

Vision Rehabilitation Through Low Vision Centers

GEORGE HELLINGER, O.D.

Dr.Hellinger is director of the low vision service of the Industrial Home for the Blind, Brooklyn, N. Y.

Within the past fifteen years, a virtual revolution has taken place in vision rehabilitation. As recently as 1950, a blind person with residual vision seeking improved sight had only the surgical road open to him, and in many cases, surgery was ineffective or contraindicated and the patient was told that nothing more could be done to help him. Since 1953, however, another road to improved sight has been opened—a road which has not only brought visual improvement to thousands of visually impaired people, but has led to a new concept of maximum use of residual sight, a concept which is more and more gaining widespread acceptance.

As one who has had the privilege of helping to launch this revolution, I would like to discuss this remarkable development in the hope that all workers for the blind will begin to work together to attain the goal of maximizing the use of residual vision for every partially sighted person who can benefit from our procedures.

The tools for accomplishing this already exist. The principle is to enlarge the image by means of optical aids so that it will appear closer and therefore easier to see. These aids include any device which contributes to the more functional use of residual vision for any purpose whatsoever. Such aids include telescopic spectacles and contact lenses for distance, microscopic lenses for near, absorptive lenses; i.e., sunglasses to reduce glare, and more often than not, simple spectacle corrections.

Before going further, let me provide a few definitions; first low vision. Low vision is vision so impaired that the individual cannot perform those daily tasks in the home and at work for which sight is essential. Within this group of low vision persons, there are various gradations.

The term low vision is not restricted to those who fall within the definition of legal blindness, but includes all those with visual acuity between 20/200 and 20/70—in fact, one might say that it includes everyone with vision below 20/20.

I realize that many agencies are limited by law or by charter to working only with the legally blind and cannot extend their services to those visually handicapped persons who fall outside that definition. I would urge that those organizations with areas of activity thus limited recognize their responsibility, either by trying to have the restrictions removed, or by stimulating other groups in the community to provide services to those visually handicapped persons not classified as blind. No person who can be helped by optical aids or other means should be denied that help because of technicalities.

Two-thirds of those evaluated at IHB helped by low vision services

As workers for the blind we are well aware that not more than 25 percent of those who are classified as legally blind are totally without sight. The remaining 75 percent have some residual vision, ranging from light perception to the upper limit of legal blindness. The most recent estimates indicate that there are probably 400,000 legally blind persons in the United States. Of these, 300,000 have some residual vision, and should have the opportunity to discover whether they can be helped by low vision services. Our experience over fourteen years at the Industrial Home for the Blind low vision clinic shows that more than two-thirds of those who were evaluated for optical aids were helped to improved visual functioning through these aids. The annual increment of newly blinded persons is estimated at 10 percent of the blind population. This means another 20,000 persons added each year to the case load of legally blind who may be helped by this service.

Formerly, the practice was to treat all individuals classified as blind as though they were totally blind; to discourage them from using such vision as they might have; and to train them to depend on their other senses of touch and hearing.

Now, in the light of the accomplishments which has proved possible through the use of optical aids, we urge each blind individual with residual vision to develop and use that vision to the greatest possible degree. To those with severe visual impairment, even a little gain in visual efficiency can be invaluable, although, to the person with normal vision, this gain would seem so slight as to be of no importance.

Vision Rehabilitation

☐ As for vision rehabilitation—vision rehabilitation is a broad concept, embracing not merely the improvement of measurable visual acuity but the improvement of visual functioning. The visual acuity as measured by the Snellen chart is far less important than the actual use the individual makes of such vision. Early in work with the visually handicapped one realizes the tremendous difference in visual efficiency between individuals with similar losses of vision. The psycho-visual efficiency of the use of remaining vision is determined by several factors. The nature and extent of the eye pathology is very important. The diabetic, for instance, whose vision varies from day to day, and even from hour to hour, has serious difficulty in utilizing his remaining sight. Other factors are the age of onset of reduced vision, the duration of the impairment, and most important, the psychological background of the individual and his attitude toward his vision impairment.

Use of remaining vision

The person who was born blind or lost his sight in infancy and who has understanding parents usually makes the best adjustment. He has learned to live with his limitation and may more readily be motivated to make the most of what he has. In contrast, the loss of vision in adolescence or adulthood, may present catastrophic problems. The damage to the ego and the capacity to recover from the initial shock will depend upon the emotional strength and maturity of the individual. His attitude toward blindness when he himself could see is another factor. If he had been accustomed to thinking of the blind person as a totally incapacitated and afflicted individual from whom all that makes life worthwhile has been taken away, this attitude will carry over into the period when he himself has become blind, and hamper his readjustment. In any case, there must be a period of mourning during which the newly blinded person will experience feelings of hopelessness, self-pity, intense depression, and even suicidal thoughts; it is only when he has begun to recover some of the feeling of normal living again that rehabilitation becomes possible. It may require from one to five years before he is sufficiently stabilized in his new situation to make improvement of visual functioning a reality. Even if provided with optical aids he is likely to compare the increased vision they afford him with his normal vision as he remembers it, and to feel that the limited improvement is not worthwhile.

Building on the ability—not the disability

When psychological and emotional stability have been regained to the point that the individual begins to want to return to normal living, and the rehabilitation process can be safely and profitably initiated, vision rehabilitation can provide one of the most important phases of the process. The modern concept of rehabilitation is to build on the ability—not the disability.

Surely it is as important to enable the client to use to the maximum what sight he retains as it is to train him to use touch and hearing as substitutes for the sight he has lost. Therefore, every visually impaired person with residual vision should be given an examination and evaluation in terms of the usefulness of low vision aids as routinely as he receives a general physical examination or an ophthalmological examination. The social worker, the counselor, the psychologist has the responsibility to refer his client to the specialist in vision rehabilitation who alone can judge the potential of improvement of visual functioning. The sense of self-confidence engendered by the ability to accomplish simple tasks by the use of optical aids is in itself a stimulus to the client's rehabilitation. The ability to look up a telephone number in the directory; to read a personal letter instead of having it read to him; to recognize a customer by sight instead of depending on recognition of his voice—all these are encouragements to the client who is trying to regain his independence and competence in living.

Ophthalmologist determines possibility of visual rehabilitation

In the vision rehabilitation procedure, an eye examination by an ophthalmologist is the first step. It is the ophthalmologist who determines whether surgery or medical intervention can offer further improvement of vision. If not, the ophthalmologist should guide the patient toward optometric services which will enable him to make the fullest possible use of the vision he retains. The ophthalmologist should stress the fact that in cases of arrested pathology the use of the eyes cannot be harmful to residual vision. He, better than anyone else, can dispel fears of straining the eyes and the fallacy of saving the eyes. His written report should indicate that optical aids may be tried without objection. At IHB we have been fortunate in the development of a close relationship between the ophthalmologist and the optometrist.

The vision rehabilitation counselor plays a major role in the program at IHB center, serving as liaison between the social service department, the ophthalmologist, and the vision rehabilitation service.

All that has gone before; i.e., the work of the social worker, the ophthalmologist, and the coordinator, has been in preparation for the optometric examination which is the focal point of the vision rehabilitation service. The staff optometrist determines the client's vision problems and brings to bear on it his special refraction techniques and his knowledge of ophthalmic lenses and low vision aids for the purpose of discovering the appliances and conditions which will enable the client to achieve maximum use of his remaining sight.

On the first visit, the examination usually requires an hour, although on subsequent visits a shorter time may suffice.

Because many clients have not exercised the function of seeing for years, they must be allowed time to become used to the idea of seeing again, and to some extent to change their attitudes toward it. Therefore, the keynote of the examination procedure is deliberation—with frequent pauses to prevent tension or tiring on the part of the client. Throughout the examination, the optometrist maintains an attitude of encouragement to stimulate the client to put forth his best efforts. He directs particular attention to the specific purposes for which the client hopes to use his improved vision. It may require from three to six visits before the optometrist is ready to write a prescription for the optical aid or combination of aids most satisfactory. Even if the appropriate lens is determined at the time of the first visit, repeated testing is desirable to make sure the client will obtain equally satisfactory results under day to day changes in his attitude and situation.

Repeated testing of aids desirable

To some extent, this repeated testing is actually training the client in the use of his appliances to obtain maximum results. Sometimes it is advisable to provide the aids on loan for a short period so that the client may try them under home conditions before he purchases them. In every case the client is encouraged to contact the center for advice if he experiences difficulty in using his appliances.

Because of the variety and complexity of the visual problems of the low vision patients, major emphasis must be on the patient and his reaction rather than on the appliances themselves. His comments and reactions during the fitting process are an invaluable guide and should be encouraged, even though they may be time-consuming.

Equipment for Examinations

☐ The equipment for these special examinations varies considerably from that in general use, especially the testing charts—both for distance and for near-vision testing. The charts should be in 100-foot gradations: 20/800, 20/700, 20/600, 20/400, and from 20/200 to 20/100 in twenty-foot differences. The tests are made at a standard distance of ten feet instead of the usual twenty feet.

For near vision, a variety of reading cards must be assembled to provide a wide range of type size; i.e., from 24-point, 18-point, 14-point—as well as the usual smaller sizes. The cards should include numbers, letters, and simple words.

Illumination is an important factor in visual efficiency in low vision cases. The examiner must try different arrangements of lighting to determine which is most satisfactory to the individual patient, and may utilize such auxiliaries as pin-hole discs, side shields, or sun visors. Sometimes these auxiliaries will in themselves produce the desired results.

The focal distance is of prime importance for subnormal vision examinations. Here, especially, the examiner must lay aside his customary approach. The problem is not to determine how much the individual can read at a given distance, but rather to discover that distance at which he can read the most with ease and comfort. In many of these cases, it will be necessary to hold the reading matter only a few inches from the eye, and in some instances it will be desirable for the patient to move the book or newspaper from side to side instead of moving the eyes.

The patient must be made aware of the inherent optical limitations of the device and the new motor coordination patterns of the eye, head, hand, and body movements. Some patients who have not read for several years will find that there is hesitation over reading all but the simplest words—even after their ability to see the print has been sufficiently raised with a new lens. Many patients will not be able to pronounce a word until they spell it out audibly, because they lack visual memory pictures of the word, although they have an auditory picture of it.

Benefits of Visual Rehabilitation

☐ I would like to discuss, in more specific terms, some of the benefits of the rehabilitation service. However, let me stress that rarely are we able to provide a client with sufficient improvement in acuity to remove him from the classification of legal blindness. Most of the clients will continue to fall within the legal definition of blindness since the greatest improvement is in near vision whereas the definition of blindness is in terms of distance vision only.

Vocational

Vocationally, many patients have gained substantially. Some have been enabled to keep jobs which otherwise would have been lost; others to obtain new jobs which would have been closed to them.

Personal

Even simple tasks such as looking up a telephone number, reading a gas bill, or performing household chores more efficiently is meaningful to most individuals.

Educational

With children, the results are equally significant. Many are attending regular public school classes who, but for their special optical aids, would have had to rely exclusively on braille.

We have also found that it is unwise to place an upper age limit on referrals to the center. Recently a ninety-three-year-old woman, completely alert, was quite specific about her aim in coming for our service. Because arthritis limited her mobility, she was particularly interested in being able to read her favorite newspaper and, if possible, get a little help for sewing and television. With new optical aids she was able to read the newspaper; with new distance correction, watching television was made more enjoyable.

Frequently Asked Questions About Low Vision Centers

☐ A few questions concerning low vision centers always arise.

Why place them in agencies for the blind?

First, why should the center be part of an agency for the blind rather than placed in a hospital setting? Hospitals were at first considered to be an especially favorable site for low vision clinics. I was enthusiastic about the possibilities of making a vision rehabilitation center part of a total eye care service in a setting which housed all medical specialities, and was, in fact, active in establishing two hospital clinics of this type.

I regret to say that the hospital-based service has not fulfilled its bright promise for at least two reasons. Vision rehabilitation functions best when it is part of a total rehabilitation process. At this time, comprehensive services for rehabilitation exist mainly in community agencies and not in hospital centers. Also, in most instances, hospital-based rehabilitation services are placed under the direction of rotating residents who move in and out of the program within a year or so. Thus there is frequently no continuity, and no real long-range development of superior skill and dedication.

Moreover, there are certain benefits which accrue to the agency for the blind from the establishment of a low vision center. The client who comes seeking vision rehabilitation may have rejected all other services of the agency. If success is achieved in improving his functional vision, he may be encouraged to accept other services which he needs. There is undoubtedly an advantage to the client in referral from the vision rehabilitation service to other services in the same agency, instead of transfer to a new environment with the attendant necessity of becoming acquainted with a new set of personnel and procedures.

How is cooperation between ophthalmologists and optometrists developed?

A second question often asked is how can we overcome the problem of developing cooperation between the two eye professions? Visually limited people are beginning to benefit from an improving relationship between the optometrist and the ophthalmologist. Formerly, persistent differences of orientation and approach made it difficult for these two professions to work together in vision rehabilitation. It is to the credit of both optometry and ophthalmology that such differences have been made secondary to the benefit of the visually handicapped patients. Consequently, with an easing of tension and inter-group rivalry, medical specialists and optometric specialists may work side by side as equals in cooperative efforts for the visually disabled. Under these conditions, not only are patients getting improved service, but research on the problems of vision will be accelerated and improved. Although this rapport is still relatively recent, its effects should be felt soon in communities all over the United States.

It is my hope that each of us in work for the blind will take some responsibility for ensuring that communities have adequate facilities to provide low vision rehabilitation service for all who need it and I don't mean a low vision clinic three hundred miles away which is inaccessible to the average blind individual.

I also hope that each of us will see that all clients with residual vision know about the possibilities of increasing its usefulness through optical aids, are motivated toward exploring these possibilities, and have the opportunity to do so. Not all will be helped, but two out of three can be helped and we won't know which two they are until we provide the opportunity for all three.

Vision rehabilitation through low vision centers is not an experiment but a successful ongoing service which has been functioning since 1953 and which can revolutionize the lives of many of the blind.

Coordination of a Low Vision Clinic

VERA SCHILLER

Mrs. Schiller is coordinator of the low vison service of The Industrial Home for the Blind, Brooklyn, N. Y.

As coordinator of the IHB low vision clinic, my most essential role is as liaison between the client, the professional staff of the clinic (optometric and ophthalmological), and the other areas of agency service. Before a client has an initial examination by the optometrist, I interview him briefly. I review with him the purpose of the examination, stressing the fact that it is not a medical examination, that we have the report from his ophthalmologist, and that we have been assured that there is no medical contraindication to the use of special lenses or optical aids. From the client, and from the social and medical records which I try to review before my interview, I try to determine the attitude of the patient toward the examination. Has he requested this special service in a positive way or was he referred to it by a member of the staff or by someone in his family who thought it would "be good for him"? Had he had any previous experience with optical aids and were they positive or negative? What does he perceive as his greatest problem, as a result of his visual handicap? Does he miss reading? Does he live alone? If not, is his family overly protective? How has he used other agency services? I then summarize for the examiner the results of my interview and of the pertinent factors in the history of the client.

Interpretation to Clients of Examination Results

☐ By the end of this first examination, the optometrist usually has some idea of whether help is possible; and while he starts on the next examination I interpret to the client the findings of this initial appointment.

If no help seems possible through vision rehabilitation, interpretation to the client is especially crucial. The positive aspects of other areas of agency services must be stressed; with those in whom fluctuation in vision is anticipated, such as diabetics, the client is assured that our service continues to be available should he note any improvement in vision; finally the client is advised that the results of our examination will be shared with his social worker, his rehabilitation counselor, and other referring sources and that they will be in touch with him concerning the next steps in the rehabilitation process.

Positive aspects of other agency services must be stressed

Happily, in about two thirds of the cases, our examination indicates that some improvement is available. My job then is to interpret to the client what is expected of him by our next visit. If we have lent him aids or glasses to try at home, I again explain, as the optometrist has already done, how they should be used. I stress the fact that practice with such aids will enable us to help him more effectively. I usually set the time and date for the next appointment, and ask him to telephone should any questions or problems arise.

Whether help is or is not anticipated, I try to communicate immediately with the other workers involved so that in their contacts with the client they can reinforce any instructions or encouragement we have given him.

This same procedure is followed in all ensuing appointments. When a prescription is finally arrived at, I clarify the financial aspects with the client. One of the proudest boasts of our low vision clinic is that no client who could benefit from any type of visual aid is deprived of help because of financial problems. Wherever possible, the client meets the cost of any aids or glasses prescribed either in full or in part. In many instances the State Vocational Rehabilitation Service meets the cost; in other cases the Department of Public Welfare pays; when no other resources are available our agency finds the funds. Perhaps it will be reassuring to agencies with limited funds to know that the average cost of glasses and other aids we prescribe falls well below $100.

Anticipation of problems that may arise

When the client finally receives the prescribed aids, I again spend time going over with him his reasonable expectations, trying to anticipate any special problems he may encounter, reminding him which device is to be used for which purpose and urging him to report any areas of disappointment or failure to use the devices. The client is urged to report his successes as well but we are far more concerned with learning of lack of success and taking the necessary steps to eliminate or correct problems which may arise. We are particularly fortunate in having such close cooperation from all of the other agency personnel. Often, a client will be more willing to articulate disappointment to a counselor or social worker because he may feel that a failure is his fault after the doctor tried so hard to help him.

Finally, each client is reminded that it is important to request frequent review of his optical aids. We stress the fact that we do not provide a substitute for his ongoing ophthalmological care but rather a supplement to it. He is advised to continue to see his own ophthalmologist as instructed but in addition to request a review appointment in our clinic on a yearly basis.

This very brief survey of my function in our particular agency should not be construed as a blueprint but rather as a guide to some of the more important factors in the functioning of a low vision clinic. Smaller agencies may not be able to provide such a breakdown of function and the home teacher, the mobility instructor, the social worker, or the counselor may find it necessary to assume more than one function. The important thing is not who will do the job or how it will be done; but that a beginning be made in every agency rendering service to visually handicapped clients.

Challenges and Opportunities—*Continued from page 282*

we subscribe to Secretary Gardner's belief that problems are opportunities in disguise. We in the federal office stand ready to help in any way possible, but in the final analysis the job that is done and the strength and growth of the vending stand program will depend on the extent to which the state agencies continue to take advantage of all resources available to them.

AAWB Roundup

Now that the leaves have all but completely disappeared from the trees and the frost is on the ground, perhaps we can dare to recall with some impunity Miami Beach in July sans air conditioning and—on the positive side—some of the highlights of the 41st American Association of Workers for the Blind convention. This issue of the *Outlook* is devoted to papers from the convention, several others from the meeting will be printed here in the months to come, and we have already reported on two important events: the giving of the Shotwell, Allen, & Macaulay awards (September *Outlook*) and AAWB reorganization plans (October *Outlook*).

And while we cannot, of course, cover the meeting completely, here are some of the other highlights.

Election of Officers

☐ The members elected Howard H. Hanson, director of the South Dakota Services for the Blind, as president elect; Mrs. Mary K. Bauman, director of the Personnel Research Center in Philadelphia, as secretary; and Cleo B. Dolan, executive director of the Cleveland Society for the Blind, as treasurer. The four new members of the board of directors are Leon Hall, supervisor of the Business Enterprises Program in Georgia; Joseph Kohn, director of the New Jersey State Commission for the Blind; George A. Magers, assistant chief of the Division of Services for the Blind of the Rehabilitation Services Administration; and Harold G. Roberts, associate director for service of the American Foundation for the Blind.

Discussion on Deaf-blind

☐ Reflecting the great concern with the problems it presents, deaf-blindness was a topic of discussion at several meetings.

The tragic increase in the number of deaf-blind children due to the rubella epidemic of a few years ago was discussed by Perkins' director, Dr. Edward Waterhouse, and Social and Rehabilitation Services administrator, Mary Switzer, in a well attended joint meeting of the Rehabilitation and Employment Services and Education Services groups.

The rubella wave

Reminding the audience that "deaf-blindness is more than the sum of deafness and blindness," Dr. Waterhouse discussed what we know now about these children, and warned that the true extent of the wave is as yet undetermined. He stressed the importance of reaching these children early through pediatricians. Dr. Waterhouse also warned that the pre-school and school programs for these children—many of whom are also mentally retarded—now in existence are not prepared to handle the numbers that can be expected within the next few years. Trained teachers, evaluation and research personnel, and films are in particularly short supply.

In commenting on these needs, Miss Switzer agreed with Dr. Waterhouse and suggested that we must devise ways and means of using the resources we have, and that teachers and other personnel needed must be sought through other than conventional means. She mentioned the national deaf-blind service center which her administration is establishing and suggested that a similar children's center be set up through the Office of Education.

In another meeting, M. Robert Barnett, executive director of the American Foundation for the Blind, discussed changes in the Foundation's emphasis on services to deaf-blind persons. Remarking that "services for this special group of disabled citizens stand at the threshold of a new era marked chiefly by the major entrance on the scene of the federal government," Mr. Barnett said that the Foundation had "begun to re-assess our role in order to avoid duplication of effort . . . it would be desirable to phase out those activities which are 'direct service' or 'client-related' in nature, not only because this would be in keeping with the general nature of our function as a national research and consultative organization, but also because more appropriate agencies will assume these responsibilities. For example, the establishment of the national center for children will obviate the need for our own diagnostic services." In discussing more specifically the road the Foundation will take, Mr. Barnett said that "more emphasis will be placed on our consultative and program development roles" and that "technical development in behalf of deaf-blind persons as evidenced by our current work with the Tactile Speech Indicator [a device which enables the deaf-blind to communicate by telephone] will be continued."

VRA Amendments

☐ In a panel discussion concerned with the "Effects of the 1965 VRA Amendments on Voluntary and Public Agencies," the three panelists, Oscar Friedensohn, director of the New York State Commission for the Blind and Visually Handicapped; William O. McGill, executive director of the Chicago Lighthouse for the Blind; and Louis R. Schubert, an assistant regional commissioner for VRA, agreed that the impact will be substantial.

Speaking as the director of a public agency, Mr. Friedensohn thought the amendments would have a special effect on "direct client services, on workshops and rehabilitation facilities, on the important element of planning, on the too-neglected area of research, and of very special importance for all of us, on the possibilities for growth in our vending stand programs."

Mr. McGill, speaking from the voluntary agency viewpoint, pointed out that the amendments "encourage a greater measure of public-voluntary cooperation than had formerly been the case. . . . Where formerly it seemed that only research and demonstration grants were available to voluntary agencies, there are new vistas opened to them by the 1965 amendments—technical assistance, workshop improvement, program expansion, project development, construction, initial staffing." Mr. McGill also thought that the distribution of criteria by the Policy and Performance Council was of great value.

Stating that "solving some *human problems* for people" is, he believes, the spirit of the new amendments, Mr. Schubert suggested that the sections dealing with extended evaluation, underemployment, reader services, management services, and statewide comprehensive and facility planning would have the greatest impact on blind people.

World Council for the Blind

☐ At the last general session, Marjorie S. Hooper, editor of the American Printing House for the Blind, reported on the World Council for the Welfare of the Blind executive committee meeting which was held in Belgrade, Yugoslavia last spring. Among the important points she covered were financing, the World Braille Council, and the perennial problem of American representation to the WCWB.

Miss Hooper said "that there was great need for additional sources of income aside from delegate memberships ($100 each year) and associate memberships ($30 each per year)." Pointing out "that many small countries, with far less population than 20 million people, could not afford to have two delegates, and for that reason had not become members," Miss Hooper reported that a "recommendation was made that the General Assembly at its next meeting in 1969 consider an amendment to the Constitution to permit countries of up to three million people to have one delegate at the present rate of $100 per year."

Braille music notation and copyrights were important topics of discussion at the meeting of the World Braille Council. Miss Hooper reported that only the United States and the United Kingdom have officially adopted the *Revised International Manual of Braille Music Notation, 1956,* and that "two days of meetings did not solve the problems raised, but the music sub-committee has been continued . . . particularly to draw up a list of the differences involved, so that they can be studied on a pragmatic basis."

About copyrights, many people present felt "that some way should be found to get international free use of copyrighted materials, be they books or music." Miss Hooper was not sure she condoned this idea, stating "After all, publishers of material for the blind do pay wages to their workers, we do pay the going price for paper and metal, and why should the copyright owners be expected to donate their rights on a different basis? Frankly, I do not feel that this is a fair attitude, except, possibly, in the case of volunteer-produced materials . . . For the record, a final decision was made to approach UNESCO to see what might be worked out along free international copyright permissions."

At the end of her talk, Miss Hooper touched on the controversial subject of American representation to WCWB. She announced that the American delegation had had a meeting last winter which ended in a deadlock on the question of 50 percent representation claimed by organizations of the blind. However, "it was decided to make another try at interesting as many national organizations as possible to attend a meeting, now slated for after the first of the year. It was also agreed that this group would be referred to as the 'Ad Hoc United States Committee for the World Council of the Welfare of the Blind,' and that the other groups to be invited to the meeting would be simultaneously invited to affiliate with the committee if they so desire. It is also the hope of the American delegation that the ad hoc committee would then evolve a plan for a permanent committee which, when founded, would require a contribution of dues and formal election of officers and, at such time as it became necessary and feasible, elect the actual members of the delegation itself."

M. E. M.

1967 Shotwell, Allen, and McAulay Awards

Each year, the American Association of Workers for the Blind recognizes outstanding service to the blind with the presentation of three awards, the Ambrose M. Shotwell Award, the Alfred Allen Award, and the John H. McAulay Award (September *Outlook*). Here are some excerpts from the acceptance speeches delivered by this year's recipients.

In accepting the Shotwell Award which honored his contributions to the advancement of educational and vocational opportunities for the blind on an international scale, Jansen Noyes Jr. challenged the professionals in the field to take active measures aimed at preventing financial aid to the mendicant blind. He said that the blind have "the same drives, the same intelligence and the same judgment as sighted people," but "the public tends to under-rate blind people and this, in turn, tends to limit their opportunities—socially, professionally, and in business."

Mr. Noyes urged AAWB delegates to persuade their state legislatures and city governments to pass laws eliminating financial aid to beggars where none now exist. Commenting further, he said that "once laws and ordinances are on the books public education is needed. Only then will they be enforced."

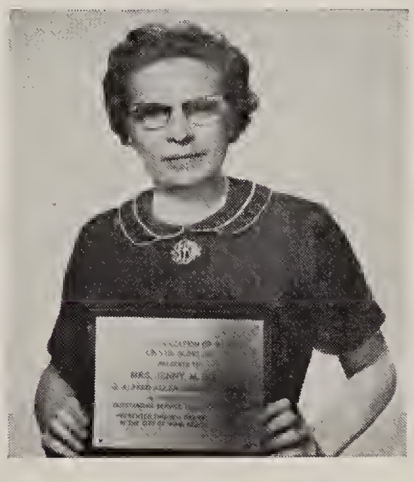
The Alfred Allen Award is presented to those whose character and dedication epitomize the spirit and quality of direct service to blind persons. Mrs. Jenny M. Beck, in accepting the award, said this award "is an honor of which one might dream—but never really expect. To be chosen its recipient makes me very happy, and very humble. It rightfully should go not only to me but to the Volunteers Service for the Blind, whom I represent and in whose behalf I accept the award with pride and pleasure . . . I shall always be grateful to our directors, to my dedicated staff, and to the dozens of volunteers who have given generously of their time and talents. In the truest sense, these are the people who have made the whole thing possible."

Remarking on receiving the John H. McAualay Award for outstanding achievement in the placement of blind persons, Arthur L. Voorhees reminisced about his long personal association with "Mac." He said, "When I first learned of my nomination to receive this award, I was profoundly and emotionally moved, while at the same time my thoughts turned back immediately to my past association with John McAulay. Not only was I one of his colleagues in the Office of Vocational Rehabilitation, but I considered him one of my very close friends. During the twelve years of our association, I learned to know him as a person of great foresight, as well as an individual with a tremendous sense of humor. . . . Because of my long friendship with Mac, coupled with my belief in the principles for which it stands, I accept this award with great humility, but with no small measure of pride. Thank you."

Arthur L. Voorhees, rehabilitation specialist at the American Foundation for the Blind with the John H. McAulay Award which he received at the AAWB convention.

Mary Switzer, administrator of the Social and Rehabilitation Service of the U.S. Department of Health, Education, and Welfare, presenting the Ambrose M. Shotwell Award to Jansen Noyes, Jr., president of the American Foundation for the Blind, at the AAWB convention in Miami Beach.

Mrs. Jenny M. Beck, executive secretary of Voluntary Services for the Blind, Inc., Philadelphia, was this year's Alfred Allen Memorial Award Winner.



A Developmental Approach to Psychological Factors—*Continued from page 289*

developed to replace the natural technique of locomotion. The very complex psychological, physical, and social factors dictate that for the most effective accomplishments to be made in mobility, the instructor should be highly and expertly trained. Without such training, a client may be taught to move independently; however, movement is only one form of ambulation and as such has only begun to scratch the surface toward organizing and reorganizing the sensorium which would lead to integral unit functioning so that the person will be able to achieve the major step toward overcoming the effects of blindness.

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The Blind Population—*Continued from page 295*

of anything like the RLF incident. We must keep each other informed of any apparent increases in the occurrence of specific conditions which should be investigated and prevented if possible before they result in a significant increase in the blind population.

The result of research now being conducted and that which will be initiated in the future will have on the occurrence of blindness cannot be predicted, though we can be sure it will provide new knowledge that will assist us in our efforts to better serve the blind and to prevent blindness and visual impairment.

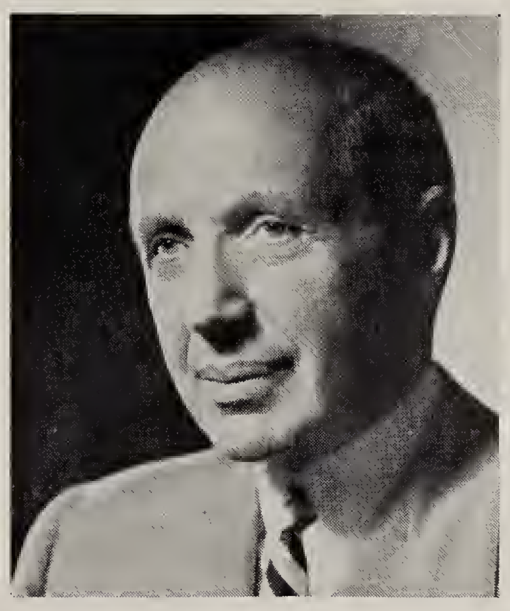
News in Brief

■ Byron M. Smith, former executive director of the Minneapolis Society for the Blind, and Eustace Seligman, chairman of the board of the American Foundation for the Blind and the American Foundation for Overseas Blind, have been awarded the 1967 Migel Medals for outstanding service to the blind. Mr. Smith and Mr. Seligman received the awards at ceremonies held in New York October 26.

The Migel Medal is awarded annually, by the American Foundation for the Blind, in recognition of outstanding contributions to the field of work for the blind on the professional and on the voluntary levels. The medal, first presented in 1937, is named in honor of M. C. Migel, the first president of the Foundation.

Byron M. Smith

Mr. Smith, this year's professional recipient, was for 26 years executive director of the Minneapolis Society for the Blind. He has served on the executive committee and board of directors of the National Association of Sheltered Workshops and Homebound Programs; the executive committee of National Industries for the Blind; and the boards of directors of the American Association of Workers for the Blind and the National Rehabilitation Association. A trustee of the American Foundation for the Blind, Mr. Smith has also served on the U.S. Department of Health, Education, and Welfare's Medical Advisory Committee. Mr. Smith is now living in Tucson, Arizona.



Eustace Seligman

Mr. Seligman, this year's lay recipient, became a director of the American Braille Press for War and Civilian Blind in 1933 and was named vice-president in 1945. He continued to serve as a director when the American Braille Press became the American Foundation for Overseas Blind in 1946, was appointed vice-president in 1956, and chairman of the board in 1959. In 1950, Mr. Seligman also joined the board of the AFB, of which he has been chairman since 1959. He is a member of the law firm of Sullivan & Cromwell, serves on the board of the Legal Aid Society, is honorary chairman of the board of the Foreign Policy Association, and is a director of the National Fund for Medical Education.

■ The results of a three-year research project made possible by a Vocational Rehabilitation Administration grant to Arkansas Enterprises for the Blind, Inc. confirm the need for pre-college training for blind students. Increased typewriting and the skillful use of tape recorders and braillewriters is essential, according to blind students who participated in the study.

The study also revealed that blind students had a higher retention rate than their sighted classmates; students with a mixed background of residential, public, or private schooling did better than those with a background of just one school; high proficiency in one skill was found to be more desirable than low proficiency in a variety of skills; the totally blind did better than partially-sighted students; the partially sighted used fewer of the new techniques, in direct ratio to their degree of vision.

■ Robert C. Jaekle and Dr. Randall K. Harley have joined the American Foundation for Overseas Blind as consultants in the Far East region. Mr. Jaekle, who served for the past four years as a mobility instructor at the New Jersey State Commission for the Blind, is the mobility and orientation consultant on the Foundation's regional rehabilitation team in Kuala Lampur, Malaysia.

Dr. Harley, who is on leave of absence from the George Peabody College for Teachers in Nashville, Tennessee, is serving as the Foundation's education consultant for the introduction of integrated education in Ceylon.

■ The American Foundation for the Blind has just announced three new staff appointments. Marian V. Wurster, who has served as a regional consultant in the community services division for the past five years, has been appointed director of the program development division, succeeding Mrs. Ferne K. Root who has left the Foundation for another position.

Dorothy Demby has joined the staff of the program development division as a specialist in social welfare. Most recently, Miss Demby was a field representative for the National Commission for Social Work Careers. Prior to that, she was director of social welfare for the United States Peace Corps in Senegal.

James T. Courtney has joined the information department as an information specialist for press relations. For the past two years, Mr. Courtney has taught social studies in a New York City high school, and previous to that he was a public relations associate for the Chase Manhattan Bank.

■ Helena Henry has been appointed head librarian at the Lighthouse, the New York Association for the Blind. Miss Henry has served previously as acquisitions and serials librarian at the New York Institute of Technology and as a member of the staff of the music library of the New York Public library.

■ The National Accreditation Council for Agencies Serving the Blind and Visually Handicapped, Inc. (COMSTAC) has announced the appointment of a committee of educators to advise the Commission on Accreditation on development of evaluative instrument specifically applicable to residential schools for the blind. Arthur L. Brandon, president of the Council, has named Dr. Jack W. Birch, associate dean, school of education, University of Pittsburgh, chairman of the committee.

The other members of the committee are Donald Blasch, director, Blind Rehabilitation Programs, Western Michigan University; William H. English, principal, department for the blind, Virginia School for the Deaf and the Blind; Margaret Esch, principal, Western Pennsylvania School for Blind Children; Dr. Ablett H. Flury, education consultant; Dr. Joseph J. Parnicky, superintendent, Edward R. Johnstone Training and Research Center, Bordentown, New Jersey; Leland C. Sanborn, superintendent, New York State School for the Blind; and Josephine L. Taylor, coordinator, Unit for the Visually Handicapped, U.S. Office of Education. Dr. Geraldine T. Scholl is acting as special staff consultant to the committee. Dr. Scholl, who is an associate professor of special education at the University of Michigan, is devoting a sabbatical leave to the project.

The committee will prepare the self-study and evaluative instruments for initial testing by residential schools for the blind, and work with a selected group of schools in trying out the effectiveness of these materials in improving these schools' performance. The five schools that have agreed to work with the committee in this project are Arkansas School for the Blind; Maryland School for the Blind; Ohio State School for the Blind, Oregon School for the Blind; and Perkins School for the Blind. The outcome of the committee's work will constitute one of COMSTAC's manuals for self-study and evaluation.

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2. Mail Subscriptions	2796	2815
C. Total Paid Circulation	2796	2815
D. Free Distribution *(including samples)* by Mail, Carrier or Other Means	361	240
E. Total Distribution (*Sum of C and D)*	3157	3055
F. Office Use, Left-Over, Unaccounted, Spoiled After Printing	382	532
G. Total *(Sum of E & F—should equal net press run shown in A)*	3589	3587

I certify that the statements made by me above are correct and complete.

(Signed) Patricia S. Smith, Managing Editor

Current Literature

What is a Computer Programmer? by Sheringford Holmes. *The New Beacon* (Royal National Institute for the Blind, 224 Great Portland Street, London, W1, England) Part 1, Vol. 51, No. 559, March 1967, p. 58-60. Part 2, Vol. 51, No. 600, April 1967, p. 86-89. A two-part article relating the experiences of Gordon Stephens and Eric Whittle, two blind computer programmers on the staff of a Customs and Excise Department in England.

The Performance of Blind and Sighted Children on the Wechsler Intelligence Scale for Children: Study 1, by M. H. Tillman. *International Journal for the Education of the Blind* (1839 Frankfort Avenue, Louisville, Kentucky 40206), Vol. 16, No. 3, March 1967, p. 65-74. The U. S. Vocational Rehabilitation Administration supported in part the research reported here by Dr. Tillman. The object of the study was to determine the validity and completeness of the information obtained about blind children through the use of the WISC verbal intelligence test.

Pre-employment Training for Houseparents, by Rachel F. Rawls and E. N. Peeler. *International Journal for the Education of the Blind* (see above for acquisition information), Vol. 16, No. 3, March 1967, p. 83-87. Mrs. Rawls is Director of Research and Special Projects, and Mr. Peeler is Superintendent of the Governor Morehead School (for the blind) in Raleigh, North Carolina. Money available through the Manpower Development Act helped finance a pilot effort aimed at developing a regularly offered training course which would enable state-supported and privately operated residential facilities to find better qualified people for houseparents.

Three Patterns of Adjustment, by Conway Davies. *The New Beacon* (see above for acquisition information), Vol. 51, No. 601, May 1967, p. 114-119. Though aware that any statement concerning adjustment theory runs into the objection that individuals are not subject to generalizations, Mr. Davies feels that by concentrating on situations rather than upon individuals, you can reach meaningful conclusions. He finds three general patterns from which the individual chooses and blends his own particular pattern of adjustment.

Guidelines for Teaching Arts and Crafts to Blind Children in the Elementary Grades by Virginia H. Coombs. *International Journal for the Education of the Blind* (see above for acquisition information), Vol. 16, No. 3, March 1967, p. 79-83. Mrs. Coombs, a teacher of Elementary Arts and Crafts at the Perkins School for the Blind in Watertown, Massachusetts, suggests five general goals necessary to an effective arts and crafts program.

Schools for the Blind in Bohemia, by Světluše Solarova. *The New Beacon* (see above for acquisition information), Part 1, Vol. 51, No. 600, April 1967, p. 92-95. Part 2, Vol. 51, No. 601, May 1967, p. 119-122. A two-part history of special education from the establishment in 1807 of the first institute for blind children in Prague to the Education Act of 1948 which brought schools for children requiring special care into the general education system.

Climbing Blind, by Colette Richard. Translated from the French by Norman Dale. E. P. Dutton & Co., Inc. (201 Park Avenue South, New York, New York 10003), 1967. 159 p. $4.50. This is the true story of a 28-year-old French girl. Blind since the age of two, she, nonetheless, succeeded in her desire to become a mountaineer and a speleologist. Her book records her experiences climbing in the Alps and exploring prehistoric caves in the Pyrenees.

The Witch's Daughter, by Nina Bawden. J. B. Lippincott Company (East Washington Square, Philadelphia, Pennsylvania 19105), 1966. 181 p. $3.50. Perdita, the witch's daughter, lives on the Scottish island of Škua with her foster mother. Her first true friend is blind Janey Hoggart who comes to the island with her family for a holiday. (Juvenile novel)

Difficult Cross-Town Trip Is Final Exam for Blind Students. *Perspective* (Illinois Department of Children and Family Services, State Office Building, 401 S. Spring Street, Springfield, Illinois 62706), Vol. 2, No. 4, December 1966, p. 8-9. Details of the "solo-hike" in Springfield which is the final exam for students in the orientation and mobility training program at the Illinois Braille and Sight Saving School.

New Frontiers for Research on Deaf-Blindness, by Herbert Rusalem with the assistance of Louis J. Bettica, John E. Haffly, and Joseph J. Parnicky. The Industrial Home for the Blind (57 Willoughby Street, Brooklyn, New York 11201), 1966. 57 pp. Free, while supply lasts. Proceedings of a seminar conducted by the Industrial Home for the Blind with the support of the Vocational Rehabilitation Administration, April 15, 1966.

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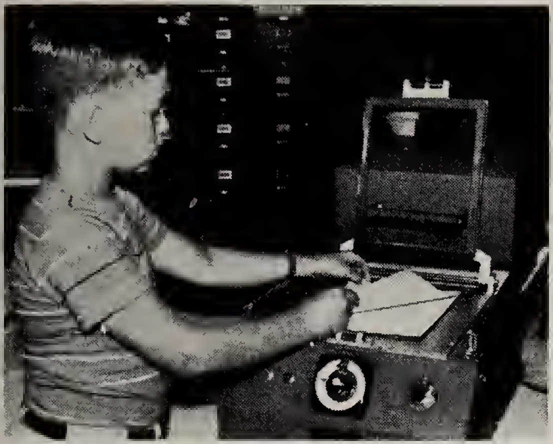

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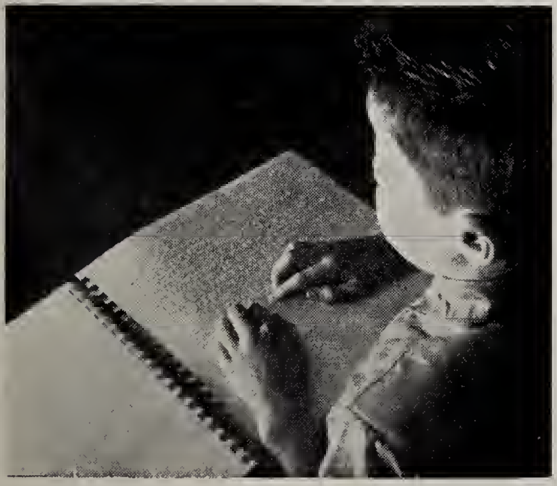

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THE NEW
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FOR THE BLIND

December 1967
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Oscar Friedensohn, Joseph Kohn, Wesley D. Sprague, Helen M. Worden, Marcella C. Goldberg

Work and its Emotional Implications
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Managing Editor
Patricia Scherf Smith

Assistant Editor
Mary Ellen Mulholland

A Symposium on Accreditation

Introduction

OSCAR FRIEDENSOHN

Mr. Friedensohn is director of the New York State Commission for the Blind and Visually Handicapped.

This symposium grew out of several sessions of the AAWB convention devoted to accreditation. While all of the papers following were first presented there, this is by no means a complete view either of the subject or a complete record of the convention meetings.

At the top of page one of the *COMSTAC Report*, published last year, is the phrase "An Idea Whose Hour Has Come." And indeed it has! The material in the symposium which follows is clearly indicative of the realization that the luxury of waiting for the appropriate time to move forward in the field of services to the blind is no longer with us. We are at this very moment on the threshold of a new era in providing for the quality of a broad range of services that American public policy accepts as those which should be undertaken on behalf of blind persons. Just as standards and accreditation have moved such fields of community endeavor as secondary and higher education and hospital services forward to their relatively exalted positions today, so it can do for the field in which we all labor.

The formalization of standards does not mean that in the past agencies and practitioners have not established such guidelines for their own endeavors. The reality of the situation, however, is that such undertakings have been spotty and inconsistent. Agencies and individuals have rationalized such efforts by feeling they were too small, or too big, or too remote, or too specialized. Now that the standards, after a massive effort, are formalized and are being committed to instruments that can be utilized by all, there is little or no reason for the citizens and professionals who have been vested by the community with the responsibilities of providing services to blind persons not to take advantage of the opportunities that exist.

The road ahead, however, is neither smooth nor straight. It is fraught with pitfalls and danger. The impact of the accreditation process will be felt differently by different types of agencies and the different disciplines working within such agency settings. In the symposium material which follows, the impact of accreditation on public agencies as distinct from voluntary agencies is explored. Similarly, its effect on agencies because of varying size and resources is explored. Further still is an exploration of accreditation on agency planning and development.

The material which follows needs no elaboration. It speaks for itself. The points of view expressed by the authors are their own and have grown out of their own experiences and commitment to their work. All of us should think about what they are saying, and discuss it wherever, and with whomever, appropriate. We must develop an individual approach to standards and accreditation that are in the best interests of the eventual recipient of the services involved, the blind person himself, as undertaken within the setting in which each individual is functioning.

Accreditation—A State Agency Point of View

JOSEPH KOHN

Mr. Kohn is executive director of the New Jersey State Commission for the Blind.

I cannot speak for the state agencies' attitude toward accreditation; I can react for *a* state agency. Essentially, standards have to be a part of every agency's purpose and function. Now COMSTAC has developed organized road signs which seem to me to be particularly useful.

Self-Evaluation

☐ Amid everyday demands, there is too little time for organized review and self-evaluation. The existence of standards provides an opportunity for finding those organizational areas that need enlargement or modification. Since decisions concerning these rest with the agency, it allows us to deal with weak links in our own way and at our own pace but within a framework of accepted and acceptable levels. Nor does this rule out the reasonable certainty that the standards themselves will be exposed to growth and revision.

Accreditation equates service agencies, training units, etc. used by the public agency and furnishes a basis for determining those whose operational level is most likely to be adequate. In this way, responsibility for the expenditure of large sums of public funds is better exercised. It is also important as a tool in cooperating with the community and with other agencies in the development of added programs or segments of programs.

Management tool

It can become a management tool for purposes of comparability of costs and performance among similar services available to the public agency. Yet it should be judicious in allowing for individual differences. COMSTAC should not and cannot be an absolute. This is not an either or world and to make all agencies similar or alike *could not* be the goal and purpose of accreditation.

Budgeting and state-wide planning

It serves as a measure of growth and of performance by the public agency. Accreditation can be used as a built-in consultative device for planning state-wide needs; for interpreting these needs to state decision-makers; for use in budget planning and presentation; and for determining what the outcomes of agency service should be.

Cautions

☐ It seems to me that accreditation is not intended to be nor should it be used as a Supreme Court of work for the blind. It should not be used:

1. To make agencies look alike at the expense of desirable variation and differences that may exist in different sections of the country or even within a single state.
2. For whipping agencies into given directions. Policy decisions must still rest with the legal organization—the appointed or elected boards and agency executives.
3. Accreditation is a reasonable yardstick for self-use. Only agencies with flagrant problems need to be concerned by it and these problems would give concern with or without the accreditation system.
4. Finally, in the period immediately ahead of us, some control may need to be exercised to avoid having our best staff unduly involved in field and on-site team evaluation assignments which at a time of serious personnel shortages can play havoc with the agency.

Accreditation — the Large Private Agency Point of View

WESLEY D. SPRAGUE

Mr. Sprague is executive director of the New York Association for the Blind.

Before discussing how I, as the representative of a large private agency, view accreditation, I would like to explain briefly why a representative of the Lighthouse, the New York Association for the Blind, is speaking on this subject. Size of budget, number of staff, and the extent of the population served are the main factors examined in classifying an agency according to size. The Lighthouse budget is $3,100,000 plus a sales forecast of $4,700,000 for Lighthouse Industries. We employ 639 people including 369 who are specifically involved in providing direct services to visually handicapped and blinded persons. More than 1,200 different visually handicapped persons seek our services every week throughout the year.

No one who is truly concerned with trying to bring about the maximum potential of disabled and/or handicapped persons through the medium of a flexible, progressive environment for work could be against the principle of accreditation as outlined in the *COMSTAC Report.* This report is a major contribution to our field. It is an excellent treatise which will become one of the most important contributions to the field of services for the blind that has developed during the second half of the twentieth century.

In fact, in the short time since the report was distributed, there has already been improvement in the operation of and services given by agencies. Many have recruited more qualified personnel, defined objectives more clearly, and produced services in accordance with recommendations in the report.

Large Agency Has Much to Contribute, But Much More to Gain From Accreditation Movement

☐ The philosophies of the large agency with its greater number of professionally trained and service-oriented staff, completely agree with the COMSTAC philosophies for service. While the large agency has much to contribute to the accreditation movement, it has much more to gain, because its personnel will be involved in this upgrading, inspecting, stimulating experience. The professional personnel will be more readily attuned to evaluating constantly current objectives in order to determine new and better methods by which future work may be accomplished for the good of the individual handicapped person involved. Staff will also be exposed to varied experiences through service on survey teams. The large agencies will also gain through the educational role they will play as others consult and observe as they themselves prepare for accreditation.

Standards Will Need Reviewing

☐ The standards for accreditation will need reviewing, editing, and strengthening as the years go by. Each of us concerned with the administration of services to blind persons must voluntarily seek and then practice better ways in which to accomplish this work. Mr. Brandon stated many years ago, "This *COMSTAC Report* is only the beginning, the initiative rests with the individuals and agencies working with the blind. The zeal with which they rally behind the Commission's successor, the National Accreditation Council for Agencies Serving the Blind and Visually Handicapped, will be the determining factor as to whether services are actually improved." This is the real challenge to which we must be equal.

There are specific standards with which all of us (large or not-so-large) may have questions. We may even take issue with some. Some are too basic, others are too lenient.

In thinking of the large agency, one must realize that such will have multiple problems over and above those experienced by a single service or less extensive service agency. The large agency will have a most important role in expediting the accreditation process. It will be required to contribute more dollars, more time and talents of its personnel who are the logical personnel to become involved in the inspection process.

Since there is greater opportunity for large numbers of agency personnel to be sought as surveyors, the large agency will have to formulate policies relative to the number and total time it can afford to contribute to NAC over and above the largest dues assessment, and the great expense of transporting and housing the numerous members of the inspection team at the time of its accreditation survey.

In order that there will be greater understanding and flexibility of approach to the degree in which standards should be met, I suggest that NAC seek out qualified and available professional personnel from allied and educational fields. This would compensate for the difficulty in obtaining a sufficient number of qualified and objective investigators.

Larger agencies will have an opportunity to have a greater number of non-adherences to the standards with the resulting possibility of a "provisional accreditation status" versus "full accreditation status" due to the potentially greater number of specific factors concerning with which it might differ. There will also be interruptions of services due to the longer time interval required in inspecting the multifarious facets of services, and the absence for long periods of time of agency personnel who would be serving on inspection teams.

Standards Which Large Agencies May Question

☐ There are a few standards with which large agencies such as ours will have to take issue. On page 67 of the report, the following quotation is noted "adequate record-keeping does not imply complexity; on the contrary, every record-keeping system must be as simple, efficient and economical as is consistent with the agency's needs." This standard requires the inspection team to bring forth a flexible interpretation so that complexity shall not become mandatory. Need for flexibility is acknowledged, required and built-in due to the insight and wisdom of COMSTAC.

Administrative standards

In an agency such as ours (which has thousands of contributors annually, which distributes over 120,000 annual reports of services, statistics, and financial information, and which possesses an extensive investment portfolio) one must consider whether it is of any real value to add expense, needless detail, and confusing financial reports to abide by specifically recommended administrative standards. It is right and accepted practice for each private agency to report its operations in accordance with the approval and format of a competent and qualified agency of certified public accountants, and openly and clearly invite the inspection of its books at any time by any contributor. The requirements for equipment depreciation; accrual accounting of endowment; segregating all contributions into those received from the public, from foundations, and from business organizations; etc., as set forth in the standards of 6.2, must be weighed in accordance with its true value and total effect upon the service and operation of a large agency. Such a division of contributions would result in a fantastic clerical job and accomplish no real purpose.

Our agency has written off its capital assets and they no longer appear on our statements. This action was completely reviewed and sanctioned by a nationally renowned auditing firm and believed to be in the best interest of the public and visually handicapped personnel whose interest we serve. It appears impractical to now require the keeping of such invoices. The work involved would be expensive and serve no real value for any other agency. The important emphasis should be on quality of services rendered, not the degree of adherence to complex administrative recommendations! Survey teams must and will, of course, weigh each agency individually and require change only when such will provide improvement.

Rotation of policy-making board of directors

One additional standard with which we do not agree is that of requiring rotation of members of the policy-making board of directors. The important objective should be to make certain there is a mechanism for assignment of those who have demonstrated ability to serve on a policy-making level, who have interest in a devotion to the objectives of the agency and who represent a variety of community, social, cultural, ethnic, and economic interests. If any agency has demonstrated these criteria for membership and practiced removal of unproductive members, it should be complimented, not chastized! The presence of a live, effective, interested, and progressive board should be the evaluative factor, not the system for obtaining board membership.

In summary, it would appear that any large agency sees the standards as the way by which there can be continued improvement for the good of the visually handicapped persons of our society. With NAC, services are bound to improve because of the stimulation resulting from the more frequent self-evaluation reviews, the experience and guidance gained by agency personnel serving on investigating teams, and by the direct and indirect effects of the accreditation process. Gains have already been made as agencies have consulted the report and consequently recruited more professional personnel; defined its objectives and goals more specifically; and carried out the types of services which will bring about the maximum potential of the visually handicapped individual.

Conclusion

☐ Accreditation will protect the client and the public by identifying quality agencies and will, in time, cause the closing of substandard agencies. Quality and meaningful output will become prime and no one can deny that these are in keeping with the intent of our charters. The effect of accreditation on agencies serving the blind should parallel the experience of improved services that other agencies in the health, education, and welfare field have enjoyed as a result of accreditation processes over the past few years.

Accreditation will also prove practical in our field. But only if all of us, who are concerned with the administration of large agencies, so educate ourselves and our policy-making boards of directors that this great investment (of dollars, time, and talents by our agencies and personnel) is correct and vital.

I firmly believe that this voluntary investment in accreditation will return much more than any tangible investment given. There will be rough areas to work out over the years, but there is no better way to achieve improved services than in giving of our time, effort, and support to the accreditation process as recommended by NAC.

Accreditation—As It Relates to Agency Planning and Program Development—I

HELEN M. WORDEN

Mrs. Worden is executive director of the Rhode Island Association for the Blind.

Accreditation can be the finest tool at the disposal of the agency administrator to promote the development of more effective and efficient services on behalf of blind persons. An awareness and implementation of the criteria for good services as outlined in the *COMSTAC Report* can help to assure these improved services.

The principal responsibility for the planning and development of improved services lies with the agency administrator as the professional person to whom the needs to be met and the changes to be made as related to accreditation should be evident. It is not his task alone, however, for without the understanding of the board of directors and their favorable decision in the policy-making which underlies the institution of new paths to be traveled and/or new programs to be planned, no progress can be made. Therefore, the administrator's first task is to create the atmosphere, impart the knowledge, and provide the motivation for the board of directors to be, not only willing, but anxious to meet the standards of accreditation.

I do not mean to leave the impression that this will be an easy task or that all changes and new programs desired will result in a short time. How long it takes will depend on the degree of change necessary and the determination of the administrator to see a program of progress begun and accomplished over a period of time, at a rate consistent with the factors which face him.

Rather than talk, in vague generalities, about how accreditation can be made to relate meaningfully to agency planning and program development, I would like to discuss the approach taken at the agency of which I am the executive director.

Importance of involving board of directors

As the agency administrator, I have always believed it my duty to keep the board of directors aware of and alerted to any development in the field which has implications either for the agency directly or as part of the background within which we operate. This has been done formally at board meetings, informally as board members were contacted either by plan or by happenstance. The board has been provided with a wealth of reading materials and has been encouraged to subscribe to pertinent publications written for or about the field. The results have been gratifying.

Because of the background provided, the board of directors was aware of the creation of the Commission on Standards and Accreditation of Services for the Blind. Since a majority of the board subscribe to the *New Outlook,* they followed with interest the evolution of the report which resulted. This was reinforced by making the staff equally aware of the development which was taking place. Hence, when the report was ready for distribution, there was an interest in knowing what had been developed and where our agency stood along the road to accreditation. Meeting standards was *not* a threat.

Agency Program Committee Appointed

☐ Copies of the report were purchased and distributed to every board member and agency department. As early as last October the board of directors appointed an agency program committee. It has a chairman and nine sub-committees each of which has at least two members.

Committee's objectives

The objectives of this committee are:

1. Gaining greater information, education, and understanding of the agency's programs.
2. Measuring the programs studied in terms of the criteria for accreditation as they appear in the *COMSTAC Report.*
3. Making recommendations and suggestions so the Association's programs will more closely meet the standards.
4. Compiling a board members manual by using the reports of each committee as written by its chairman in addition to the inclusion of such other pertinent data as should be provided (bylaws, history of the organization, etc.).

Areas which the committee will be studying are:

1. Orientation and mobility service
2. Social casework service
3. Volunteer service
4. Workshop program
5. Public relations
6. Garden project (not a "fragrance" garden)
7. Homebound industries
8. Vision rehabilitation
9. Recreation

As previously stated, this committee has an over-all chairman who with the president of the organization and the executive director meet with each of the committees for the self-study. The professional staff in each of these areas are also active with the committee.

In the area of agency administration, agency function and structure will be studied by the executive committee; financial accounting and fund raising will be studied by the finance and public support committee; personnel practices will be reviewed by the personnel committee, and the physical facilities study will be done by the properties committee. This study involves all areas of Association service and all board members serve on at least one committee.

Progress to date

What has the progress been to date? The total program study committee has met to talk about objectives, methodology, etc. It was they who decided that the reports should be written by the chairman and reviewed by the professional staff involved. They believed this would make the reports more effective since the jargon of the field would surely creep in if they were written by professionals.

Four of the sub-committees have completed their assignments. One will complete its work during my absence. It is the committee chairman's goal that the rest of the sub-committees complete their work during August. Since the board has no meetings in July and August, the work year begins in September. The chairman plans to rotate board members to a different committee during the next year, adding to the sub-committees new board members elected at the last annual meeting. I do not have to tell you that the committee has a dynamic chairman and an enthusiastic board with which to work.

Conclusion

☐ Because board was knowledgeable and motivated to high standards, meaningful program changes have been begun already. The recruitment of an additional professionally trained social worker has been approved, a director of volunteer services has been hired, and a part-time psychologist added to staff.

What I have intended to portray is the assurance that accreditation can play a vital role in agency planning, program development, and the recruitment of a board of directors who will work and who want to help provide better services if the opportunity to do so is present. Too often it is not.

Accreditation—As It Relates to Agency Planning and Program Development—II

MARCELLA C. GOLDBERG, ACSW

Mrs. Goldberg is director of welfare services at the Pittsburgh branch of the Pennsylvania Association for the Blind.

The values of accreditation are obvious and have been too well documented for me to repeat them at this time. The preliminaries that are involved in preparing for accreditation are too often overlooked, and it is these values to which I would address my brief remarks at this time.

Complacency

☐ Complacency is a disease to which we are all prone at one time or another, and there is nothing like a good diagnostic evaluation as a preliminary to an attempt to cure this all too chronic disease. To be sure, we may stir up an acute exacerbation, and feel less comfortable, but in the long run, we and the agencies we represent will fare better if we do a little stirring, cause a little discomfort, and then seek the cure.

As agency administrators, we are all aware that our programs are not what we would like them to be. We can blame ourselves, our staff, our budget, our board, our clients, and even the community as a whole. Shifting or sharing the blame does little to remedy the situation. It is like shifting the weight from one foot to another when one is tired—it really does nothing to remedy the situation, it only serves to relieve a discomfort temporarily.

I suspect that you all share my thinking that we have developed some complacency about and ability to live with this discomfort. But this cannot go on forever, particularly with the momentum created by the exciting movement to accredit agencies serving the blind.

With standards now available against which we can evaluate function, structure and program, the time is *now* to begin to assess, bit by bit, the way in which we measure up to the minimum. Hopefully we may find ways in which we surpass the minimum.

All who share responsibility should participation in evaluation

This is not an undertaking for one person alone, but one which warrants sharing with all those who bear responsibility. Certainly it warrants sharing with board and staff—for they all too often become complacent in their roles, secure in the belief that they have a "pro" in the administrator who keeps abreast of new developments, sees need for a change, and needles for action when it is indicated. Sometimes all the needling in the world can not stir one whit of reaction—the complacency rut is too comfortable, the proprietary interest is too deep, and the resistance to change is too ingrained to permit growth of any sort.

I am reminded of our own board reaction when the COMSTAC standards were received, and copies were distributed. A cursory examination of them brought a quick reaction of "*we* won't have any problem qualifying," but assignment of specific standards to proper committees brought critical evaluation of areas where change was indicated, and efforts are being made to institute those changes. Coupled with this was great pride where our agency exceeded the minimum—and this is good, for it helps assuage the pain of the recognized shortcomings.

Minimum Qualifications For Staff

☐ One area which has many problems is that of minimum qualifications for staff. The appalling manpower shortage for professional personnel leaves all of us with vacancies which are impossible to fill at full professional level; there is a job to be done; one has no choice but to accept sub-professionals and try, through inservice training and tight but adequate supervision, to get the job done. When adequate personnel is available, often the budget is not sufficient to allow for employment at the going competitive rate. Those of us who are supported in whole or in part by United Funds feel this acutely, as well may those who do their own fund raising. However, in the latter instance, funds may be cumulative, rather than on an annual basis, and a surplus from one year (because of a staff vacancy) may well be used to raise the salary level when staff is available.

What Services Should Be Offered?

☐ Another problem is the variety of services to be offered by any given agency, and whether in a given community, sound planning may not make referral for or purchase of service a move more wise than establishing a separate service which can be costly, duplicating, and ineffectively staffed.

In many instances, community needs may not justify establishment of all services outlined—and community financing may not enable employing the variety of personnel recommended for the service.

In a local voluntary agency such as I represent, existing in a community theoretically replete with a wide variety of special services, sheltered workshops, voluntary and official agencies, in fact in a community which has a national reputation for self study and planning, there are still gaps in service, shortage of professional personnel, financial problems, and duplication of existing services.

Duplication and competition should be avoided

Sound agency planning requires evaluation of all existing services in the community, geared to meshing where possible, to improve quality, to discourage duplication both of professional staff and program, and to avoid competition for client load and community funds. Planning must upgrade quality of service, rather than quantity of service. Statistics are important but only if they reflect quality service. A central registry of blind clients—one that indicates only identifying data and agencies giving service—should be as essential to agencies serving blind persons as it is to other social agencies serving the community. The soundness of cooperative casework is evident, just as is the opposite which can lead to counter-recommendations, and failures of plans and participation.

Since we adhere to the basic philosophy that an agency for the blind cannot be "all things to all blind people," we try not to duplicate those existing services which we feel are of good quality. Also, we feel that the blind person is entitled to freedom of choice for the services he needs, just as he is entitled to freedom of choice for medical care.

Our planning committee decided that they, as members of our board, would like to have first-hand knowledge of services provided to blind clients by other agencies in the community. I prepared a list of these agencies, contacted the agency executives, and informed them of the plan and purpose. Each of our committee members then selected the agency he wished to visit, made a board-to-board contact, and plans to visit the agency. In some instances, I will accompany our board member; in others, our workshop director will do so. Some will visit alone. We are anxious to see the written reports the board members have been asked to submit.

Building Requirements and Recommendations

☐ Building requirements and recommendations provide another problem area. Many of us function in antiquated structures, perhaps physically sound but certainly not esthetically in tune with modern concepts of work areas. This is often an added deterrent to attracting staff, and is completely contrary to accepted philosophy that a blind person, just as any other human being, has need for pleasant surroundings. Despite the availability of grant subsidies, this is a very difficult problem to interpret to the community and to the board, and requires great communicative skills.

These are all areas of study in which we are currently involved, and I for one am most grateful to COMSTAC and the Accreditation Committee for providing standards against which we can measure our own status, with a goal to areas for specific improvement. We hope to achieve accreditation and are planning and working toward that end.

Work and Its Emotional Implications

SAUL FREEDMAN

Mr. Freedman is coordinator of rehabilitation services at the New York Association for the Blind.

Work is a uniquely universal routine activity touching upon all cultures and classes. It is an activity so taken for granted by all that only when we are suddenly denied involvement with it do we recognize its importance to our very individual organizational structures. The dictionary defines work as an "expenditure of energy, striving, application of effort to some purpose."[1] Kessler embellishes upon this by stating that "work is not merely an activity; it is an emotional release, or stabilizing force in daily living. Inactivity destroys this energizing factor."[2] Thus, to each individual involved, work is purposeful and needs fulfilling.

Since the onset of his existence, man has worked to insure his survival. This basic need for physical and emotional security has persisted through nomadic and tribal societies into more highly organized and specialized agrarian and industrialized ones. The opportunity of having other needs met through work activity has grown in direct proportion to the specialization of societal labor. "Man doth not live by bread alone."[3] Since work now offers "bread" in the abstract form of income or trading power, similarly we have sought to fulfill our needs and satisfactions in abstract forms. Work is the primary vehicle to carry us to our needs of feeling useful, productive, and complete.

The Need To Work

☐ The above terms are not frequently employed by those who have found themselves unemployed because of their disability. The following remarks of individuals applying for rehabilitation services reveal that they are nevertheless painfully aware as to what they have lost and what it means to them:

Although eligible for Social Security, Mr. D. expressed a desire to continue working. "I'm willing if they let me."

Mrs. K. expressed the idea that, "everyone should contribute something. If I don't, I feel useless."

"After twenty-three years of marriage, now my wife has to go to work to support me." Mr. R was very much concerned about economic security. Employment "for my children's respect," appeared strong in the picture.

"What can I do now that I'm . . . I can't see."
Now on welfare assistance, Mr. J. stated, "It's better than nothing, but I'd rather be independent."

"I don't like to work in a factory or sell newspapers."

Mrs. M. expressed a strong desire to "make something of myself—to feel useful, to earn a little money—I can't bear idleness. I want to live a normal life."

This paper was prepared for and delivered at the 1967 annual convention of the American Association of Workers for the Blind in Miami Beach, Florida.

These declarations, which are far more succinct than our feeble efforts at paraphrasing might be, require no interpretation as to what occurs when we lose work through disability. If we might attempt a partial summation, however, we find experienced a decline in living standards, a depletion of savings, a dependence upon others or the community for support, and decreased job mobility. Concomitant psychological effects include a loss of self-respect, a loss of dignity, a loss of status in the family and community, a decline in effort due to discouragement, apathy towards one's future, a restricted social outlook, and tensions and suspicion towards one's family and friends.

Premature placement can be harmful

Striving to regain their completeness and "normalcy," many who experience a diversity of losses because of their disability see re-employment and work as the key to their rehabilitation and restoration to the community. We have been derelict too long in our professional responsibilities by giving only lip-service or even refusing to recognize the harmful and devastating effects of premature placement. We have so often offered that cliche-ridden placebo, "*get* that person a *job* and most of his problems will be solved" that many of us have fallen ill to this false and irresponsible treatment. We have even denied the individual the dignity of *helping* him *seek employment.* The emotional impact of this will be discussed later. Anxious to return to his community, the individual who is disabled because of blindness, deafness, cardiac involvement, or other conditions, comes to us in varying degrees of shock, depression, anxiety, confusion, and probably economic need. He is uncertain as to what his new work role should be. His only guides are the misconceptions, prejudices, and stereotypes he possessed regarding that disability before he himself became disabled. Our premature involvement of the prospective rehabilitant in a discussion of work is a sin of omission. Our offering of institutional jobs in sheltered shops, or typical "blind jobs," or typical "deaf jobs," or typical "negro jobs" is a sin of commission for it serves to falsely reinforce all that of which the disabled person was fearful. We have offered nothing more than a psychological coup de grace. Sheltered forms of employment most certainly have a very vital role for those whose limited abilities preclude their successful functioning at more competitive levels. It offers for many the opportunity of feeling useful and productive. For others, it can be the vital stepping stone for skill acquisition and the overall growth necessary for other employment.

Rehabilitation Before Placement

☐ Have we as professional workers sometimes erred in prematurely placing people *below* their potentials without benefit of the rehabilitation process? The individual so placed will ultimately feel dissatisfied. His self-concept will change to one of ever-increasing devaluation. Since society makes status judgments based upon one's employment, this process of devaluation will probably be accelerated by the attitudes of the disabled individual's family and friends. We rarely stop to weigh and reflect upon the loss of talent to society in general when any individual works below his potential. If prematurely placed in a "dead-end job," initiative dies. Discouragement and apathy soon set in. The individual then begins to atrophy. The fact that work placement itself fails to meet the disabled individual's needs is reflected in rehabilitation studies conducted at the University of Minnesota. "Levels of satisfaction for the handicapped groups are consistently lower than those of their control counterparts in all areas of satisfaction."[4]

Rehabilitation must meet rehabilitant's needs

The possibility that administrators may express more concern for number of disabled people placed, rather than those rehabilitated, could easily influence placement workers and rehabilitation counselors to follow suit. In the rush for placement, insight is lost or never developed as to how to best meet the prospective rehabilitant's needs. A job may be offered that is inappropriate. The offer might be accepted. The feeling, "I guess there is nothing else for me to do," may never be voiced. To the person who, despite his circumstances, expresses some strength in refusing this offer, we find on occasion the challenge and chastisement for non-conformance hurled back in the form, "Tell me what you would like to do?" or, "What do you think you're suited for?" or, "This is all we have available right now." On occasion, we find that some of us are irritated by the job seeker's refusal of our offer. This job seeker has on occasion justification for feeling that we are actually saying to him, "Face it. You're blind. Be grateful for what you're being offered." In so doing, we become guilty of being bestowers of *misdirected, unhealthy* charity. The offering of a job without considering the job seeker's abilities, interests, and potentials, can be regarded as a dole—a means to an *end,* with the emphasis on the word *end.* If the disabled individual accepts this offer, feelings of "personal devaluation"[5] as labelled by Cholden, will ultimately occur. Other emotional components of inferiority, self-pity, and frustration will set in.

Placement is not rehabilitation

We fall prey to a common pitfall when asked by anyone, "What kinds of work do blind people do?" Any effort to respond suggests that anything not enumerated is beyond tthe capacity of the blind individual. The setting of such narrow limits for any disabled individual quickly states to him that his vocational opportunities have been narrowed. If we wish to avoid premature discussion concerning work and possible job placements, we, meaning all involved in rehabilitation including administrators, placement workers, counselors, and instructors, must come to understand the concept that finding jobs does not solve problems. *Placement is not rehabilitation.*

Placement has a most vital role as one of the major steps in the rehabilitation process. If, however, attempted in and of itself without involving the prospective rehabilitant in the more complete process, we run the risk of harming the individual by not providing him with the adequate preparation he requires to function independently. The fact that some individuals keep returning for placement services is demoralizing and destructive to the person as well as wasteful of his and rehabilitation personnel resources. This failure may be a direct result of inadequate preparation and premature placement.

Independence is goal of rehabilitation

The goal of a rehabilitation facility should be to make all the individuals it is servicing independent of it. Effective and meaningful rehabilitation certainly incorporates placement of the rehabilitant. But, to repeat, placement in and of itself is not rehabilitation. Carroll states that, "Total rehabilitation, then, is the process whereby adults in varying stages of helplessness, emotional disturbance and dependence, come to gain new understanding of themselves and their handicap, the new skills necessary for their new state, and a new control of their emotions and their environment."[6] The first step of the rehabilitation process must be a thorough diagnostic evaluation of the prospective rehabilitant. Each individual applying for rehabilitation services is unique. He is multidimensional. For his evaluation to be complete and significant, it must be multidisciplinary in approach. Rehabilitation instructors, counselors, social workers, psychologists, psychiatrists, ophthalmologists, and other medical and paramedical personnel all contribute to the understanding of the prospective rehabilitant. Insights are shared as to the individual's interests, skills, problems, needs, and potentials.

The successful completion of the diagnostic evaluation, which is the first step in the rehabilitation process, allows for the development and implementation of a prevocational training program to meet the individual's unique needs. For this to be successful, a stereotyped program universally applied must be avoided. This prevocational training might also be referred to as the treatment phase of rehabilitation. Its focus is to provide those new skills and understanding necessary to help the disabled individual deal with his new life situation in a more effective manner. Depending upon the individual's needs, this might be achieved through courses in braille, mobility, home economics, techniques of daily living, typing, memory, manual arts, handwriting, and ease of spoken communication to mention a few. Understanding and insight can be achieved through individual counseling, group vocational counseling, individual therapy, group therapy, and casework services for the individual and family. The length of prevocational training should be determined by the individual's needs and progress. It is vital that all involved in the rehabilitation process understand that prevocational training is not vocational training. It is preparation for vocational training, the third stage of the rehabilitation process.

Returning rehabilitant to former occupation

Our placement efforts should flow in the direction of returning the individual to his former employment whenever possible. If placement opportunities for disabled individuals are to be broadened, attention must first be focussed upon the expansion of vocational training opportunities. If vocational training opportunities are expanded, placement opportunities will almost automatically follow suit. While some agencies have specialized in offering vocational training, the diversity of subjects offered is always realistically limited by their resources. Rather than duplicate the facilities already existing in the community, greater cooperation and participation with these resources should be enlisted in the training of disabled individuals. These community resources might be more comfortable with this new role if they were assured that the referring agency were still involved in trying to help them work out any problems which develop. Many advantages to the use of such facilities accrue including the vital one whereby the disabled individual is gradually continuing his return to the community.

Work Must Be Effective and Meaningful

☐ If each of the first three steps has been successfully completed, the prospective rehabilitant is now ready to enter into the fourth and final stage of the rehabilitation process, placement. It is through employment as a vehicle to independence that the individual seeks to return to the community. We have cited previously the consequences of premature placement. What shall we label effective and meaningful work? Let us mention just several criteria for consideration so that others, such as yourselves, who are far more expert, may expand upon them:

Work must offer the opportunity for the utilization of the individual's talents.
Work must offer the individual an opportunity for growth, improvement, and security.
Work must offer the individual a just wage for his skills.
Work must offer thte individual the opportunity of feeling useful and productive through his return to the community.
Placement should include job follow-up to insure effective adjustment to work.
Work should develop confidence in the rehabilitant, his family, and his employer.

As stated by Carroll, "The loss of sight is a dying."[7] The rehabilitation process enables us to learn to live again. The rehabilitation agency does not nurture the disabled person forever. He must mature again. In this growth process, the individual may wish to set work goals which we professionals might consider unrealistic. We must not be limited by our own prejudices, our misconceptions, and perhaps limited imaginations. Although we may be uncertain as to the feasibility of the individual's interests, we must encourage him to select his goals and reach for them. We must recognize that everyone has the right to fail and that strength and growth are to be gained through such failure.

Placement and stereotypes

Effective, meaningful, and imaginative placement can contribute much to remove the stereotypes society has regarding suitable occupations for blind people. A major contribution in this area might come from our phrase-makers if they were to cease using such slogans as: "Hire the handicapped, their rate of absenteeism is lower," or "Hire the handicapped, their rate of turnover is lower," or "Hire the handicapped, they are more loyal." Such phrases succeed only in getting across the idea that their rate of absenteeism is lower because they may be afraid to be absent or late; their rate of turnover is lower because they may be too insecure to leave and find a better position; that their loyalty is greater because they may be fearful of their employer or fellow workers; in short, that they may be different, insecure, and inferior. MacFarland stated, "A composite picture of the six factors determining work efficiency will clearly answer the question, 'Are blind workers as efficient as their sighted competitors?' in the affirmative." Every employer wishes to engage the most suitable worker for the given amount of wages he is willing to invest. Disabled workers, who have been *rehabilitated,* have a quality product to offer to employers, themselves. They can live, work, and compete in equality with their non-disabled peers. As productive members of society who have dignity, purpose, skill, and a sense of completeness, the entire community profits through their participation.

In 1886, Dr. T. R. Armitage, a London physician interested in work done by blind individuals, stated, "It will be well, in considering the various employments open to the blind, to take first the case of those who have learned a

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Postural Compensation in the Motor-Handicapped Blind

Irwin M. Siegel, M.D., F.A.C.S.

Dr. Siegel is attending orthopaedic surgeon and head of the orthopaedic department, Strauss Surgical Group, Louis A. Weiss Memorial Hospital, Chicago, Illinois; clinical associate in orthopaedic surgery at the University of Illinois College of Medicine; consultant in orthopaedic surgery to the State of Illinois Visually Handicapped Institute; and medical coordinator for the Vision Foundation for Blind Youth.

Vision is such a stunning sense that its use for postural orientation all but completely dampens other sensory modalities. If the body is to attempt postural compensation in the face of visual loss, input through remaining senses must be abundant enough to enable the subject to successfully contemplate his stance and movements. How can this be accomplished? Examination reveals that not only the solely biomechanical and psychological factors, but the perceptive variables as well are important, e.g., blindness is often only one aspect of a larger neurological loss, motor perceptual disability also being present. This is particularly true in cases of congenital blindness in which marginal brain damage has occurred. Thus, postural training should never be conducted in a void. Exercises are performed best with reference to a vertical surface, such as a wall. Sensation of limb position in space is enhanced by exercising in front of a large fan. The correct "feel" of upright carriage can be learned only through repeatedly enforcing the engram gained by such proprioceptive feedback. The use of tumbling, trampoline drill, or any other activity designed to increase kinesthetic input is of value in laying the ground work for postural refinement.

Difference between normal and abnormal one of degree rather than kind

Although the kinesthetics of ambulation have not yet been fully elucidated, it is apparent that the difference between abnormal and normal gait patterns is one of degree rather than kind. The same mechanisms for security and balance which the blind are required to use can be noted in the sighted during periods of normal growth, unusual stress, temporary loss of vision, or other situations in which the apparatus of secondary posture control is employed. In this regard, wide-based out-toed gait is seen in the sighted infant taking his first steps, as well as the sighted adult attempting to maintain balance on a steep incline. Even so-called "blindisms" are not peculiar to the blind. Head rocking is not uncommon among otherwise normal infants where it is used as a self-stimulatory mechanism to "keep in balance" psychologically as well as physiologically. It is of interest to note that this automatism is often employed at bedtime in the dark. The use of such techniques by the blind, as by the sighted, may be effective, but their cost in energy to the organism makes them inefficient in the extreme.

Postural problems of the partially sighted

The postural problems of the partially sighted are often as serious as those of the blind and partially deaf, particularly when sight or sound perception is only unilaterally present. Such individuals tend to point with the functioning organ and usually veer to that side. During rehabilitation blindfolding the sighted eye may be necessary, at least in the initial phase of mobility training. Occluding one ear has also been of value in correcting a tendency to veer.

Many factors involved in postural compensation

Many factors are involved in postural compensation and they are often difficult to measure. For instance, the proper use of the Hoover long cane involves a cross-patterning of body movement. Several of our multiply handicapped pupils have been taught cross-patterning and crawling before being introduced to the cane. Such preliminary instruction seems to facilitate the early phases of cane training.

A complete orthopaedic and neurological evaluation, including an examination of stereognosis, position sense, and tactile kinesis, can offer clues to the particular needs of each student. In meeting these needs, special techniques must be developed and applied, particularly when blindness is compounded by motor loss. In these instances rehabilitation is at best difficult, but meeting the challenge is often rewarding.

Case Reports

□ A group of case reports describing some postural problems seen in the motor handicapped blind follows. Each summary illustrates the nature of the problem and its treatment, followed by comments.

A 23-year-old blind female had a variety of orthopaedic defects. She was the product of a normal pregnancy and delivery and had met her motor milestones at the average times. But, when she was twenty months old, she sustained a brain injury which left her a spastic quadriplegic and totally blind.

She had dealt with her blindness and motor problems reasonably well, having completed high school at a nonspecial facility. Numerous surgical procedures performed to increase stability in her lower extremities and extensive attempts at physiatric rehabilitation proved only moderately successful. A tendency toward recurrent depressions added to her organic problems.

Examination revealed a typical spastic gait with mild to moderate spasticity in the upper extremities. She had difficulty with balance and walked with the aid of crutches. A progressive spinal curvature complicated her postural problems. Hip flexion contractures were severe, but the feet were plantigrade. There was an increase in lumbar lordosis as well as adduction and internal rotation contractures of the right hip. A lack of supination of the right wrist was also noted. Neurological examination revealed good tactile localization, stereognosis, position sense, graphesthesia, weighing perception, vibratory sense, and two point discrimination. No gross loss of motor perception could be detected.

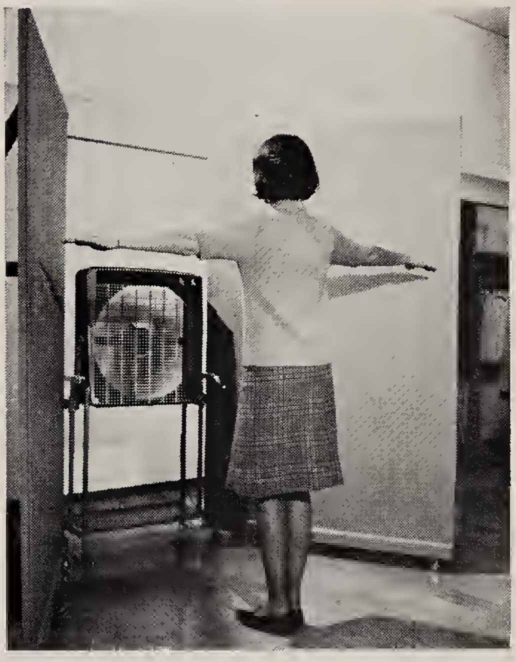

FIG. 1. Sensation of limb position in space is enhanced by exercising before a large fan.

Gait and ambulation training and rehabilitation exercises, including stretching of the flexors of both hips, were initiated under the supervision of a physical therapist. Initially, it was necessary to drill the student in creeping, crawling, and cross-patterning. Subsequently appropriate postural exercises were utilized which were performed in front of a large fan. Emphasis during her training was placed on balance and contracture stretching in the lower extremities. She progressed from two-crutch walking to walking with one hand on a supporting rail.

Close observation during training revealed that hip adduction and internal rotation deformities on the right were seriously impairing her gait, and a surgical operation was performed to amend this. She has continued to improve since this surgery.

Appropriate orthopaedic evaluation and attention can prove of value in the rehabilitation of the motor-handicapped blind student. In this case, a series of surgical procedures, combined with an intensive program of physical therapy, expedited the patient's motor rehabilitation. Good balance and coordination were major problems. Emphasis was originally placed on mat exercises. Later, a sequential program of balancing on all four limbs, creeping, crawling, and, finally, standing balance exercises were followed. Kinesthetic input was enhanced by performing the exercises in front of a large fan (Fig. 1).

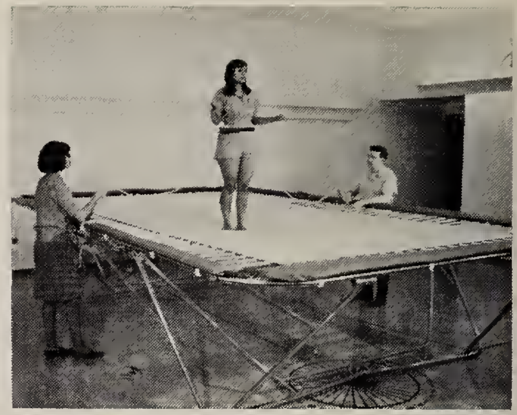

FIG. 2. Trampolining increases proprioceptive input and refines postural reflex skills.

A 13-year-old congenitally totally blind female had a moderate spinal curvature with increased lumbar lordosis. She had a severe bowing of the knees, and anterior curvature of both thighs and legs. Her trunk was foreshortened, her fingers reaching approximately to the level of her knees. She had a history of multiple fractures of the lower extremities during early childhood, all of which healed without incident. X-rays were taken which revealed the stigmata of osteogenesis imperfecta tarda. The postural problem was essentially one of balance of the trunk and upper limbs over the lower extremities.

A standard program of postural exercises, mobility, and orientation training was initiated. Because of her bony deformities this patient progressed more slowly than the average, but she was bright, alert, and well motivated and eventually was able to travel as well as her fellows.

Deformities can be attempt to compensate for structural abnormalities

Most of the deformities noted in this case were attempts to compensate for structural abnormalities in the back, hips, and lower extremities. No attempt was made to correct these deformities surgically because the patient's segmental balance was in compensation and she was functionally stable.

Because of the anterior bowing of her thighs and legs, her weight bearing line was forced posterior to her knees and her back condition represented an effort to maintain the erect position. It is important to note that in a rehabilitation program functional restoration should supersede cosmetic correction. Efforts to obtain better appearance alone often result in poorer performance.

A 12-year-old totally blind female had spastic quadriplegia. She had undergone numerous orthopaedic procedures to gain stability about the feet and ankles. She could barely stand, using a heavy cane in her left hand. Some left torso shift was present and flexion contractures of the elbows, wrists, hips, and knees were noted. There was severe pes planus with ankle valgus.

This patient had no concept of verticality. She walked with a hesitant wide-based gait. Her balance was tenuous. Since she required a heavy stick for stability while walking, she could not use the long cane.

Balance exercises were prescribed. Ambulation was started with the patient tethered to the instructor with a light belt. A modified light cane which was short enough to provide stability was provided. Gradually less support was required. No effort was made to correct her posture beyond what was necessary for effective ambulation.

The "jump position" and wide-based gait were maintained in this student as they contributed to stability. Balance exercises, combined with gradual weaning from support, enabled her to eventually discontinue the use of a heavy cane and to use a long one effectively.

A 19-year-old congenitally totally blind male had been diagnosed as a

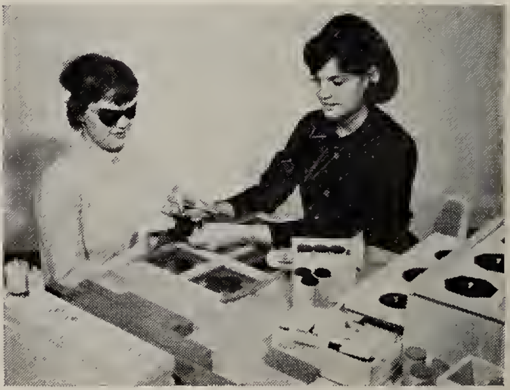

FIG. 3. Montessori instruction emphasizes basic form recognition and manipulation.

spastic paraplegic. His gait was characterized by spastic circumduction. His posture was compromised by intoeing and a wide-based stance. There was difficulty with balance and an increase in lumbar lordosis with a flexible torso shift was also noted. His tendency to veer to the right when tracking was corrected by placing a weight on the left upper extremity. Bilateral hip flexion contractures were present. The student could not stand on one foot alone, and walking on the heels and toes was impossible because of foot deformities. Neurological examination failed to reveal motor perceptual deficit.

A manual muscle examination was performed and appropriate strengthening exercises, as well as balance drill and contracture stretching, were started. The student was given a regimen of physical therapy and physical education.

Frequently the standard mobility program must be modified to accommodate a student's disability. An accurate manual muscle examination can reveal specific motor loss and aid greatly in structuring a rehabilitation program. Veering tendency can often be corrected by weighting on an upper extremity.

A 17-year-old totally blind male had neurofibromatosis and a secondary optic nerve tumor. He was overweight and had the obvious stigmata of his disease including multiple skin lesions and neurofibromata of the superficial nerves. He was very clumsy in his gait and posture, and walked with a heavy out-toed gait. A mild dorsal kyphos was present. Psychometric testing revealed that he was functioning intellectually at approximately the seventh-grade level.

Postural exercises were initiated and as he had some difficulty with motor learning tasks, special tactile learning techniques were employed. These utilized Montessori instruction and emphasized gross form recognition and manipulation. A program of trampoline drill was begun (Fig. 2). Through these measures the patient has improved. His posture has become more acceptable and his gait less clumsy.

Basic form recognition and manipulation provide excellent preparation for the performance of gross motor tasks. The Montessori apparatus and techniques can help to develop such skills in the blind (Fig. 3). The balance requirements of trampoline drill offer a kinesthetic experience which tends to exercise and refine motor perceptual abilities.

A 16-year-old male had a history of congenital total blindness. In addition, he had been given little opportunity to move independently or, in any way, to experience the world around him. Neurological examination revealed a congenital cerebral defect involving the occipital cortex and certain sensory centers producing a postural ataxia. The student engaged in frequent lateral head rocking with hyperkinetic motions in all extremities. He moved very rigidly and was constantly off balance. A mild mid-thoracic scoliosis was noted. The gait was rigid and wide-based and marked pes planus was present. His head was held turned toward the left with the chin elevated, and there was gross muscle wasting in all extremities including the small muscles of the hands.

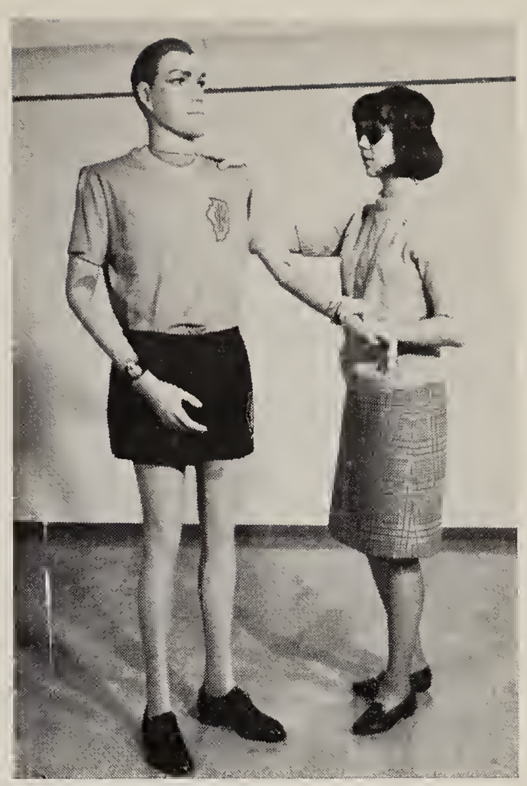

FIG. 4. "Brailling" the mannequin helps structure appropriate body image.

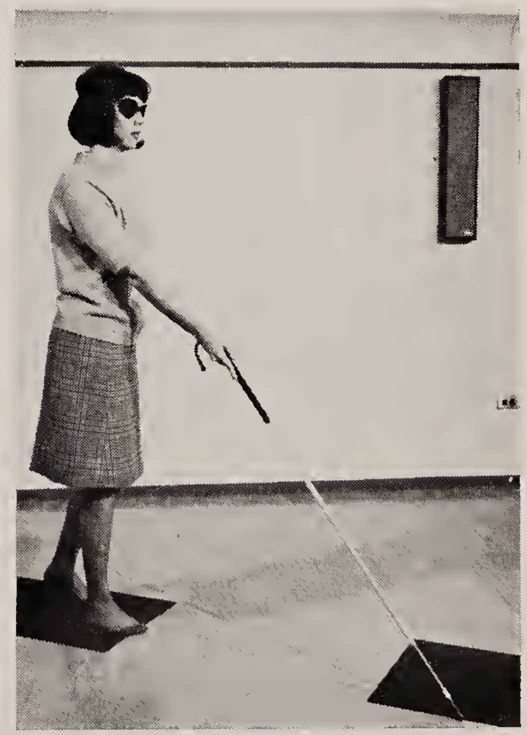

FIG. 5. Kinesthetic input during ambulation is increased by walking barefoot on textured runners.

A full program of posture training, including relaxing exercises and standard physical education drill was initiated. A variety of sensory stimulating activities, including the use of a full-sized mannequin for demonstration of body parts and position, were programmed (Fig. 4). The student continues on this regimen and has shown progressive improvement.

Treatment of sensory deprivation

The proper treatment of sensory deprivation is the provision of lavish stimulation. All manner of kinesthetic experience will be offered this student. As his balance and mobility skills improve, more refined techniques will be used. These may include barefooted ambulation on textured runners as a supplement to standard mobility training (Fig. 5). The use of a full-sized mannequin has proved of value in this case in helping the student structure an appropriate body image.

Summary

☐ The postural apparatus in the blind is severely compromised by motor disability. However rehabilitation can still be effective through the use of special techniques suitably tailored to the requirements of the individual student.

Each of these cases illustrates certain of these needs. Many orthopaedic and neurological diseases can be complicated by blindness (e.g., gargoylism, Friedreich's ataxia, Marfan's syndrome, etc.) and blindness can compound any motor problem. The therapy of malposture requires clarification of the basic cause(s) of divergency (biochemical, psychological, perceptual, etc.) with treatment aimed at functional correction. In this way optimal rehabilitation can be accomplished.

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The Process of Vocational Development — Implications for Counseling Male Blind College Students

PAUL SEVRANSKY, Ph.D.

Dr. Sevransky is assistant professor and counseling psychologist in the department of student services at the City College of New York. His duties include coordination of the educational and counseling services for handicapped students attending the college.

In recent years vocational psychologists have gradually shifted their emphasis from the prediction of vocational success to the investigation of vocational development. The traditional trait-factor model calling for the determination of essential job factors and the measurement of psychological traits related to these factors has been found wanting by many practicing counselors. They have found that utilizing test and occupational information does little to resolve the basic indecisiveness of the client, and the counselors have sought a more dynamic understanding of the process of vocational choice.

The term "vocational development" suggests that choice of an occupation is not a single event at a critical point in life but the culmination of a gradual process which began in early childhood and which may continue throughout the work life of an adult. Super has divided the vocational development of the individual into five major stages: growth; explorations; establishment; maintenance; and decline (Super, 1957). Each stage has characteristic development tasks which the individual must fulfill if he is to continue to the next stage. Super's concept of vocational maturity reflects the degree to which the individual has successfully met developmental tasks appropriate for his age group.

Individuals differ in vocational maturity

Individuals differ considerably in their vocational maturity, i.e., in their readiness to make vocationally relevant decisions at a given point in time. Although our educational system requires the student to make critical life decisions at certain points in his educational career (ninth and twelfth grades, college sophomore year), many are not ready to make them. This lack of readiness frequently cannot be dealt with by providing test or occupational information. The question is not "What choice is best for the individual?" but "Why hasn't the student attained a level of maturity or stability whereby he can utilize appropriate information to make important decisions about himself?"

Determinants of Vocational Motivations

☐ The determinants of vocational motivations are complex and have not been thoroughly investigated. Nonetheless, our considerable knowledge about the general developmental process provides a basic understanding of the more specific process of vocational development. Donald Super, a counseling psychologist, and Erik Erikson, a pychiatrist, have borrowed extensively from general developmental theory in their writings about the vocational decision-making process. I would like to outline briefly some of their ideas and suggest implications for our understanding of the vocational decision-making process with blind persons.

Process of developing a self-concept

Super conceives of vocational development as the process of developing and implementing a self-concept. The self-concept develops "through direct self-evaluations of experience, through the internalization of the other evaluations which are experienced, and through the selection of experiences and evaluations on the basis of identification with others" (Super, 1957).

Role playing has important part in vocational development

Learning about the self frequently takes place through role playing. A child has a number of role models available to him in and out of his home with whom he may identify. While playing at these roles he learns about the kinds of behavior that meet his own needs and win approval from significant persons in his environment. Role behavior that is found acceptable to the self and to significant others is incorporated into the self-concept. Behavioral patterns not found acceptable are rejected. The process of assuming and evaluating a variety of roles continues through adolescence and adulthood. As the person matures, the role behaviors he accepts become more realistic and more founded on specific areas of endeavor. When an individual talks about his vocational choice he is also talking about the kind of person he believes himself to be. Through the process of vocational exploration he can determine whether the role the job makes him play is compatible with his self-concept.

Relationship between finding an occupational role and development of ego identity

Erikson has emphasized the important part that finding an occupational role has for the development of ego identity in late adolescence. Ego identity is defined as one's sense of inner sameness. It denotes the synthesis which a late adolescent has derived from all of his previous experience in order to be ready for the tasks of adulthood. These include significant identifications, basic psychological needs and defenses, ability developed from endowment, as well as consistent roles played.

"Psychosocial crises of childhood"

The ego identity develops and is modified during what Erikson terms "the psychosocial crises of childhood." The first four psychosocial crises or developmental stages are essentially a reformation and expansion of the Freudian oral, anal, phallic, and latency periods. Successful resolution of these crises will successively lead to the development of a basic sense of trust about the world, a sense of autonomy about one's behavior, a sense of initiative in expanding one's social and intellectual horizon, and a sense of industry in acquiring the rudimentary skills required by the culture.

With the establishment of a good initial relationship to the world of skills and tools, and with the advent of puberty, adolescence begins. The essential developmental task of the adolescent period is to develop a stable and consistent sense of self within a socially useful role. The successful handling of this task leads to the establishment of a stable ego identity. Lack of success leads to identity diffusion. Most male adolescents focus their energies on the establishment of an occupational identity. Inability to settle on a vocational goal indicates that the developmental task of adolescence is not complete and may reflect a basic personality disorganization in the individual.

Super and Erikson thus agree on the importance of early developmental factors for the establishment of an occupational identity. Identification, role playing, and reality testing are essential mechanisms in this process. We shall now attempt to utilize the two theories in our understanding of the process of vocational choice of blind male college students.

Substantial Number Unsure of Vocational Goals

☐ A substantial proportion of male college freshmen, with or without physical disabilities, are unsure of their vocational goals. For them college is a period of exploration and trial, of learning more about oneself, and reaching for roles consonant with the self-concept. The complexity of an industrial society, the limited opportunity to explore occupational duties within college courses, and the general unavailability of occupational role models all contribute to the difficulty of selecting a goal. Changing initial plans, floundering from one major field to the next, or postponing one's choice by selecting a non-occupationally relevant major are common occurrences. Despite these formidable impediments, most students manage to find an appropriate vocational objective prior to graduation.

Vocational choice of college students

Blind tend to be more unsure than the sighted—reasons why

The blind student is more likely to be found within the floundering group than is his sighted classmate. He tends to be more unsure of his goal as a freshman and has greater difficulty implementing his plans after graduation. I would like to discuss four major reasons, derived from the theories of Super and Erikson, for the greater uncertainty of the blind student. These are problems related to 1) identification process, 2) reality testing, 3) handling of preadolescent developmental tasks, and 4) development of a stable ego identity. It is likely that the problems are more severe for the congenitally blind person with no light perception than for other categories of blindness.

Children find it rewarding to incorporate elements of the behavior of significant adults into their own repertoire. The exact mechanism of this process is not fully known, but it seems to occur without teaching by the adult and without the full awareness of the child. Through identification, the child learns about social and sexual role behavior and internalizes the moral standards of society.

Identification process

Vision is of great importance in this identification process. Congenitally blind children are unable to play skillfully at being mother or father or other adult roles. The inability to copy dress and the behavioral mannerisms of the adult emphasizes the blind child's feeling of being different from members of the sighted society.

The birth of a blind child is a traumatic experience for many parents. Child-rearing patterns of overprotection and neglect are common. Early in his life, the child senses rejection by the parents and grows to mistrust the adult world. The research of Sears, Rau, and Alpert (1965) suggests the identification is facilitated when the like-sexed parent is warm and responsive to the needs of the child. We would, therefore, expect that positive identification is less likely to occur among blind children.

Identification after childhood facilitates the development of social and occupational roles. The lack of visual means for identification as well as the unavailability of interested adults may hamper learning of social roles. When considering a professional occupation, blind students seek out blind persons who have entered the occupation. They seem to feel positive identification is possible only with other blind persons.

Reality testing

We learn about ourselves through interaction with the physical and social environment. The child must be aware of the demands of the environment and adjust his behavior to these demands in order to secure satisfaction. He actively experiments to learn about his impact on the environment and to develop a repertoire of behavior that will satisfy his needs.

The absence of visual feedback makes it difficult for the blind child to learn the physical and social consequences of his behavior. Blind children rely heavily upon significant adults to provide them with this information. Unfortunately, many adults do not provide accurate feedback, especially negative feedback. Parents avoid informing their blind child about the inappropriateness of certain behavior. Teachers, in their misguided efforts to be supportive, reduce scholastic requirements. As a result, many blind students enter college with distorted ideas about their achievements, aptitudes, and personality patterns.

Preadolescent development tasks

Blind children tend to develop at a slower rate than do sighted children. This is true for physical, social, and emotional development. Although most college freshmen are chronologically in the late adolescent stage, many blind students are dealing with problems that are characteristic of individuals in preadolescent or early adolescent stages.

Common areas of social immaturity among blind students

Two common areas of social immaturity among blind students are the establishment of independence from the family and the formation of mature heterosexual relationships. Many blind children tend to be overprotected. Blind children require additional attention because of their need for a substitute for visual stimulation and for protection against physical danger. The emotional investment required of a mother compounded by her guilt feelings makes it difficult for her to release her blind child. The likelihood that the blind child will be an only child or the last child adds to the problem. Many blind college freshmen have never lived away from home and are dependent upon their mothers for much of their physical care. As a result, the college years are spent either in extreme adolescent rebellion or continued overinvolvement with the mother.

Heterosexual interests typically begin at puberty and grow throughout the adoloscent period. However, it is not unusual to find blind college students who have never dated and have limited sexual information. The blind child can not be sexually aroused by visual stimulation and has frequently been taught by his parents to repress all sexual feelings. The intense emotional involvement with the mother and the association of blindness with sexual inadequacy are additional causes of their limited heterosexual experiences. We frequently find that sexual impulses are sources of conflict and anxiety throughout the college period.

Stable ego identity

The development of a mature ego identity depends upon the successful handling of earlier development crises, the incorporation of earlier identification with adults, and the selection of a congenial vocational role. It is likely that the blind student will have difficulty synthesizing all aspects of the self because they are in conflict. In addition, parents and teachers do not provide him with a set of clear role expectations that he can respond to in his quest for an appropriate social role. The incidence of ego diffusion, thus, tends to be high among blind students.

Modification of Existing Counseling Progams Needed

☐ The high incidence of vocational immaturity among blind college students and the likelihood that the immaturity emanates from basic developmental factors suggest a need for modification in existing rehabilitation programs and counseling practices. I would like to propose a number of modifications to better deal with these problems.

Postponement of course may be good for blind student

With the pressure for college acceptance, concern about the draft, and the increasing need for graduate training, it is rare that a student will postpone entry into college to find himself. The pressures for immediate entry are less intense for blind students. If the student has had limited experiences away from home, has disabling emotional problems, or has limited knowledge about occupations, postponement of college may be a realistic plan. The possibility of developing a program of part-time college work together with meaningful social and work activities and psychotherapy should be explored.

Federal-state rehabilitation programs are designed to prepare an individual for a specific vocational goal. The law requires the client and counselor to agree on a specific goal prior to the student's entry into college. Yet many college freshmen are not ready to commit themselves to a specific occupation.

Has he reached a stage where exploration is meaningful?

The liberal arts curriculum at most colleges is designed to help the student explore a variety of fields. Students are not required to commit themselves to a specific goal until their junior year. It is paradoxical that the rehabilitation regulations require the more vocationally immature blind student to make his commitment before his sighted colleagues. The basic question that should be asked of the prospective student is "Has he reached a stage of development in which exploration will be meaningful?" If he has formulated questions that are answerable during the first two years of college, we can expect that the college experience will lead to a realistic vocational goal.

He should have self knowledge

It is important that the student has accurate information about his achievement level, aptitudes, and personality characteristics. Test results can provide any part of the answer. The student should have an opportunity for interacting with a wide variety of individuals who will provide accurate feedback. Group counseling or therapy with fellow students may be helpful in attaining this end.

He should know adults

It is essential that the blind student have an intimate relationship with an adult. Colleges should be selected that provide for after-class student-faculty contact. The student should have an opporunity to meet and socialize with blind and sighted professionals in a variety of fields.

He should participate in all facets of life

The student should be encouraged to leave home when he attends college, or at least go away for the summer if he must attend a commuter college. He should be encouraged to participate in heterosexual social activities sponsored by rehabilitation agencies at the college. Psychotherapy should be available to cases in which early emotional blocking prevents full utilization of the growth experiences of the college years.

In recent years there has been a shift from the trait-factor approach in counseling to one that views vocational choice as an expression of ego development. Clients are not seen as devoid of test and occupational information but as lacking the personality resources to deal effectively with the task of decision-making. The writings of Super and of Erikson stress the importance of early developmental processes in the formation of a later occupational identity. The blind college student is seen as arrested in his vocational development primarily because of problems related to (1) the identification process, (2) reality testing, (3) handling preadolescent developmental tasks, and (4) development of a stable ego identity. Several modifications in existing rehabilitation programs and counseling practices are recommended to deal with the high incidence of vocational immaturity among blind college students.

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trade or profession before they lost their sight. In such cases, the general rule is, as far as possible, to continue in their former or similar employment in which the previous training will be of use . . . But there are many who lose their sight in adult life who cannot continue their previous work. These must seek that kind of employment for which they show most aptitude."[8] We are all aware of the scientific progress made in the past eighty years. We are still trying to implement Dr. Armitage's findings. Our interests in human dignity in general and rehabilitation in particular, should make us aware that we are capable of closing the human resources gap.

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Report from Washington

At a ceremony in the East Room of the White House on October 3, President Lyndon B. Johnson signed into law H.R. 12257, the Vocational Rehabilitation Amendments of 1967.

"In the next few years, this law will turn hope into achievement for thousands of our people," said the President in his remarks: "And it will prove something to us in history: that in America there is no such thing as a 'Hopeless Case' ".

As Public Law 90-99, the new legislation does the following:

1. Extends the authorization of appropriations for the basic program of grants to the states for vocational rehabilitation of the disabled to $500 million for fiscal 1969 and $600 million for fiscal 1970.
2. Authorizes appropriations for an additional year for a comprehensive state wide planning for vocational rehabilitation services.
3. Authorizes the establishment and operation of a National Center for Deaf-Blind Youths and Adults.
4. Authorizes a program of project grants to states for providing vocational rehabilitation services to handicapped migratory agricultural workers and members of their families.
5. Requires that vocational rehabilitation services be provided by state vocational rehabilitation agencies without regard to the place of residence of the handicapped individual.
6. Provides a fixed allotment percentage for the District of Columbia to permit it to receive increased federal financing for vocational rehabilitation services.

Postal Rates

On October 11, the House of Representatives passed H.R.7977, the bill increasing salaries for employees of the federal government and increasing postal rates as well. This bill included all the provisions of H.R.7192, introduced by Rep. Robert Corbett (R., Pa.), simplifying and expanding postal laws affecting matter mailed for the use of blind persons.

H.R.7977 expands the free mailing privilege for reading matter, educational aids, special devices, as well as sound reproducers and writing equipment to physically handicapped persons who cannot read conventional printed material. It eliminates the penny-a-pound rate now in effect for certain types of reading matter and equipment as long as these items are provided for blind and physically handicapped persons free of charge or at cost.

The bill also provides that letters in raised characters, sight-saving type, or recorded form may be mailed free by blind or physically handicapped persons. At present, letters mailed by blind persons are at the third class postage rates.

The Postmaster General is given the authority to prescribe size and weight limitations on all matter mailed under this section of the law.

The Senate Committee on Post Office and Civil Service began hearings on H.R.7977 late in October. Details of Senate action will be carried in the next issue.

HEW Reorganization

Owing to space limitations, full details of the reorganization of the Department of Health, Education, and Welfare which combined the functions of the Administration on Aging, Vocational Rehabilitation Administration, and Welfare Administration under a new constituent agency called the Social and Rehabilitation Service, were not carried in the October 1967 issue of *The New Outlook for the Blind.*

In addition to regrouping rehabilitation services, crippled children's services, and mental retardation construction grants under the new Rehabilitation Services Administration, the reorganization reassigned other functions as well.

The Administration on Aging has been assigned social and other ancillary services formerly administered by the Bureau of Family Services of the Welfare Administration for old age assistance recipients in addition to its grants authority to assist in furthering the development of programs for older persons.

The Assistance Payments Administration will assume that same Bureau's responsibility for administering grants to the states for public assistance cash payments.

The Children's Bureau will continue to administer maternal and child health and child welfare services. In addition, it has been assigned administration of the juvenile delinquency program and the social service aspect of the program of aid to families with dependent children. However, services for crippled children has been transferred to the Rehabilitation Services Administration.

The Medical Services Administration is primarily responsible for administration of the medicaid program under Title XIX of the Social Security Act for tthe medically indigent.

Administration of *all* research and demonstration activities carried out by the three realigned constituent agencies will be housed in the Office of the Administrator for Research and Demonstrations. Dr. James F. Garrett, formerly Associate Commissioner for Research at VRA, has been assigned to this position. When the reorganization plan is fully implemented, regional offices of HEW will reflect the new constituent agency terminology with SRS Regional Commissioners responsible for approval of state plans.

William D. Bechill remains head of the Administration on Aging with the title of Commissioner. Joseph H. Meyers will serve as Acting Commissioner of the Assistance Payments Administration. Katherine B. Oettinger, newly appointed Deputy Assistant Secretary of HEW for Family Planning and Population, will remain in charge of the Children's Bureau until a successor is appointed. Dr. Francis L. Land was named Commissioner of the Medical Services Administration, and Joseph Hunt will be Commissioner of the Rehabilitation Services Administration.

Some of the appointees will serve in an acting capacity until the reorganization plan is fully implemented.

New Appointments

Surgeon General William H. Stewart announced the appointment of Theodore D. Woolsey as acting director of the National Center for Health Statistics. The Center is the statistical arm of the Public Health Service and is responsible for the nationwide collection, analysis, and dissemination of vital and health statistics.

Mr. Woolsey has been deputy director of the Center since 1963. He succeeds Dr. Forrest E. Linder, who retired from the federal service to accept a teaching position in the University of North Carolina's School of Public Health.

A graduate of Yale University in 1936 with a B.A. degree, Mr. Woolsey did graduate work at the Johns Hopkins School of Hygiene and Public Health. He entered the federal service in 1938 with the Bureau of the Census, and later spent two years as a statistician in the New York State Department of Health.

In 1956, Mr. Woolsey was named assistant director of the newly created U.S National Health Survey and in 1960 became chief of this survey. The National Center for Health Statistics was organized in the same year, incorporating both vital statistics and health statistics national operations. In 1963, following a reorganization of the Center, Mr. Woolsey was named deputy director.

I. P. S

Current Literature

Placing the Blind and Visually Handicapped in Clerical, Industrial and Service Fields, by Mary K. Bauman and Norman M. Yoder. Office for the Blind (Department of Public Welfare, Commonwealth of Pennsylvania, Harrisburg, Pennsylvania 17120). 1967. 331p. Section II of this manual lists job descriptions (arranged by DOT numbers from the Dictionary of Occupational Titles) developed from the raw data of 752 statements by actual blind workers.

Conference on Aid to the Visually Limited, Proceedings, Washington, D. C., March 24 and 25, 1966. American Optometric Association (7000 Chippawa Street, St. Louis, Missouri 63119), 1967. 182p. $5.00. The purpose of the conference was to explore the needs—economic, visual, social, vocational, and avocational—of the visually limited, to assess current ways of meeting such needs and to suggest further improvements.

Improvement of Visual and Tactual Form Discrimination, by Anne Danielson Pick. University Microfilms, Inc. (313 North First Street, Ann Arbor, Michigan 48197). Doctoral dissertation, Cornell University, 1963. 66p. $4.00. Experiments were performed with the use of sighted subjects who were blindfolded during the tactual tests.

A Quantitative Analysis of the Visual Terms Used by the Blind in Their Spoken Language, by Natesh Rathna. University Microfilms, Inc. (see address above). Doctoral dissertation, Indiana University, 1963. 64p. $4.00. Investigator presented questionnaires to two groups of twelve students each, one group being sighted and the other group being congenitally blind.

Development and Analysis of Some Tactual Measures of Intelligence for Adolescent and Adult Blind, by Eoline Christine Cull. University Microfilms, Inc. (see address above). Doctoral dissertation, University of Southern California, 1963. 284p. $13.50. In testing the measures of mental abilities the author used both blind persons and blindfolded sighted persons.

Stereotypes of the Blind Toward the Sighted in Contemporary American Society, by Lorraine Norma Gaudreau. University Microfilms, Inc. (see address above). Doctoral dissertation, Cornell University, 1963. 293p. $13.50. This research is based upon the premise that the stereotypes of the title *do* exist and details a concrete research project testing such stereotypes.

The Needs of Young Blind Children and Their Parents, by Joan Toomer. *The Teacher of the Blind* (Royal School for the Blind, Church Road North, Wavertree, Liverpool 15, England). Vol. 55, No. 4, July 1967, p. 112-117. The author, who runs the Parent's Unit of the Royal National Institute for the Blind, discusses the theories and policies involved in the operation of the Unit.

Mobility for the Junior Blind Child, by Doris Tooze. *The Teacher of the Blind* (see address above). Vol. 55, No. 4, July 1967, p. 108-111. Includes a classified list of the various types of mobility clues with suggestions for use in training.

Mobility as a School Subject by J. A. Leonard. *Teacher of the Blind* (see address above). Vol. 55, No. 4, July 1967, p. 102-107. Dr. Leonard is with the Medical Research Council in the Department of Psychology at Nottingham University. He believes that the skill required to enable a child to become an actively mobile individual can be broken down into various sub-skills, the principles of which can be taught in the same way as any other school subject.

International Conference on Sensory Devices for the Blind, Proceedings, London, June 1966. Edited by Richard Dufton. St. Dunstan's (191 Marylebone Road, London, N. W. 1, England), 1967. 477p. £ 2 10s. The papers presented at the conference are arranged under the following general headings: Mobility as a General Problem; Surveys—Sociocultural, Mobility and Reading; Echo Location—Man and Animals; Mobility, with Special Reference to Reports of Practical Trials of the Sonic Monaural Aid [Kay device]; Psychological Aspects of Mobility Guidance Displays; Reports on Sensory Researchers in the Netherlands and Canada; Mobility Aids - Current Researches on Sonic and Optical Systems; Reading Aids; Rehabilitation and Mobility; and Sensory Evaluations and Researches in the U.S.A. Two workshop sessions are reported, one on mobility and one on reading.

Blindness, 1967, by American Association of Workers for the Blind, Inc. The Association (1511 K Street, N. W., Washington, D. C. 20005), 1967. 199p. $3.00. The fourth issue of an annual published by the Association under a grant from the Vocational Rehabilitation Administration. The useful listing of "U. S. Government Sponsored Research to Study Blindness" is once again supplemented. The continuing series "Best of the Past for the Present" presents two reprints, Maurice de La Sizeranne's "The Blind as Seen Through Blind Eyes" (Chapters II and III) and Valentin Häuy's "An Essay on the Education of the Blind."

M. M. R.

News in Brief

■ The Seal of Good Practice awarded by the American Association of Workers for the Blind to agencies conforming to AAWB's Code of Ethics will be discontinued at the end of this year. The discontinuance of these awards was officially enacted at AAWB's 1967 national convention as one of a number of amendments to the association's constitution and by-laws. In recommending this amendment, the committee charged with revision of the by-laws advised that use of the seal be terminated "because of the establishment of the National Accreditation Council and the desire of the Association to support the Council in every way possible and not to duplicate its functions."

■ The Seeing Eye, Inc. of Morristown, New Jersey has announced plans for an expanded grants program in ophthalmology, veterinary research, mobility, rehabilitation, and other fields. To help in evaluating applications for the grants, a seven-man advisory panel of specialists in various fields has been appointed.

Members of the panel are Dr. A. Edward Maumenee, director of the Wilmer Institute, Johns Hopkins Hospital, Baltimore; Dr. Irving H. Leopold, chairman of the department of ophthalmology, Mount Sinai Hospital, New York; Dr. Frank W. Newell, chairman of the University of Chicago's Eye Research Laboratories; Dr. Richard E. Hoover of Baltimore, an ophthalmologist and mobility expert; Dr. Mark W. Allam, dean of the University of Pennsylvania School of Veterinary Medicine; Louis H. Rives, Jr., of the Social and Rehabilitation Service Division, U.S. Department of Health, Education, and Welfare; and Dr. Mark L. Morris, Jr. of the Morris Animal Foundation, Denver.

■ Fred Dechowitz has been appointed executive secretary of the American Association of Workers for the Blind, the major professional organization for those engaged in work for the blind in North America. Mr. Dechowitz, who has had much experience in community organization and in developing services for special disability groups, was most recently executive director of the Baltimore Association for Retarded Children, Inc.

He received a B.S. degree in education from Rutgers University and a M.S.W. degree in community organization from the University of Maryland.

■ The John A. Hartford Foundation, Inc., of New York City has awarded $268,000 to the Massachusetts Institute of Technology for a three-year program to continue development and evaluation, prepare manufacturer's drawings and specifications, and build 20 production models of a high-speed English-to-braille embossing system which has been under study at M.I.T. for the past six years.

As improved models are completed and tested out in the laboratory, developers plan to field test them in schools. Through these field tests, engineers will identify and correct technical or operational defects in the system and make the design ready for industrial production and general use. First of the M.I.T. Brailler units will be available for placement in selected schools next fall.

The M.I.T. Brailler—paired with a conventional typewriter and linked by telephone line to a central time-shared computer—enables a typist with no knowledge of braille to produce immediate grade two braille because the computer translates English from the typewriter into braille signals to drive the Brailler, which produces braille at more than 190 English words per minute. The system can also emboss braille from the paper tapes used in printing establishments to operate typecasting machines for ordinary inkprint publishing.

The M.I.T. Brailler was originally conceived and designed by students and faculty in M.I.T.'s department of mechanical engineering. The English-to-braille computer program, called DOTSYS, was studied by the M.E. group, but is largely the work of the M.I.T. Center for Sensory Aids Evaluation and Development, which has also assumed responsibility for continued development and evaluation of the Brailler.

■ Frances M. Crawford has been appointed home teaching consultant in the Office for the Blind of The Pennsylvania Department of Public Welfare. In this position, she will serve as consultant on home teaching to Pennsylvania Commissioner for the Blind Dr. Norman Yoder and his administrative staff, and to home teachers working out of the six district offices of the Office for the Blind.

Previous to joining the Office for the Blind, Miss Crawford was an instructor in the graduate program for training home teachers of the blind at Western Michigan University, Kalamazoo. Prior to that, she was a home teacher for the Virginia Commission for the Visually Handicapped.

■ A braille resource file for home teachers, rehabilitation center instructors, rehabilitation counselors, teachers of blind children, and active blind people is being produced by the Midwestern Conference of Home Teachers. The file, which will list more than 200 items on five by eight cards with braille dividers, will be ready this spring. Deadline for orders is March 1, 1968. The resource files, which will cost $5, can be ordered from Otto L. Peterson, Services for the Blind, 1513½ East Fulton, Garden City, Kansas 67846. Checks should be made payable to the Midwestern Conference of Home Teachers of the Blind.

Although the resource file is being prepared only in braille at present, an ink print edition will be produced if there is sufficient interest.

■ The National Accreditation Council for Agencies Serving the Blind and Visually Handicapped has announced the establishment of a commission on standards. This commission will be responsible for continuing the work of standard setting begun by the Commission on Standards and Accreditation of Agencies Serving the Blind (COMSTAC).

Professor Benjamin Franklin Boyer, a Council board member, professor of law, and former dean of Temple University School of Law, has been appointed chairman of the commission. Other members are Owen R. Davison, executive director, Health and Welfare Council of Philadelphia; Harry E. Hayes, director, services for the blind, Kansas Department of Social Welfare; Norman V. Lourie, executive deputy secretary, Commonwealth of Pennsylvania Department of Public Welfare; William O. McGill, executive director, The Chicago Lighthouse for the Blind; Miss M. Anne McGuire, consultant in social administration, Waynesville, N.C.; and J. Max Woolly, superintendent, Arkansas School for the Blind.

Suggestions for revisions and additions to standards can be sent to Dr. Boyer in care of the Council's office, 84 Fifth Avenue, New York, N.Y. 10011.

■ Helen Keller was named the "Greatest Living American Woman of 1967" in a poll conducted by the Minnesota Woolen Company of Duluth. The poll, said to be one of the most extensive of its kind ever held with the exception of the federal census, was conducted by the company's sales representatives by means of a door-to-door tabulation which reached homes throughout the nation. Collected ballots were sent to the company headquarters where electronic data processing equipment was used for unbiased tabulation of the results.

Minnesota Governor Harold LeVander presented the award which was accepted on Miss Keller's behalf by Frank Johnson, executive director of the Minneapolis Society for the Blind. Richard Polinsky, president of the Minnesota Woolen Company, presented the American Foundation for the Blind with a check for $500 at Miss Keller's request.

■ A two-year National Institute of Mental Health grant of $69,240 will provide partial support for the development of a reference library, a consultation and training center, and services for persons with responsibilities for developing program materials in mental health and family life education which will be developed by the Mental Health Materials Center, Inc., New York City. Alex Sareyen, executive director of the center, will be project director.

■ A brochure and order form describing the revised and expanded 1967 edition of the TOWER System for measuring the job potentials of handicapped persons is now available from the Institute for the Crippled and Disabled, 23rd Street and First Avenue, New York, N.Y. 10010. TOWER, a work sample method developed by the institute, stands for Testing, Orientation, and Work Evaluation in Rehabilitation.

■ Dr. Harry M. Meyer, Jr. and Dr. Paul D. Parkman have received one of the American Academy of Pediatrics' E. Mead Johnson Awards for 1967 for their rubella immunity test and for the development of the first effective experimental vaccine against rubella. Both Dr. Meyer and Dr. Parkman are on the staff of the Division of Biologics Standards of the National Institute of Health.

The rubella immunity test makes it possible for a physician to determine within a matter of hours whether an expectant mother has antibody protection against rubella. The test also promises to speed the availability of rubella vaccines, since the effectiveness of experimental attentuated virus preparations used in clinical trials can be evaluated more rapidly by this test. The experimental vaccine is now being used extensively in clinical trials in this country and abroad.

■ The Perkins School for the Blind, Watertown, Mass., and the John Tracy Clinic, Los Angeles, California, have joined forces to help children who are both blind and deaf, it has been announced by Mrs. Spencer Tracy, founder and president of the clinic, and Dr. Edward J. Waterhouse, Perkins' director.

The John Tracy Clinic's experiences with its 23-year-old home study program for parents of deaf infants will provide the basis for a new course for parents of deaf-blind children which will be adapted and distributed by Perkins. The Perkins-Tracy home study program will give parents of deaf-blind children the basic information, guidance, and encouragement required to begin the training of a child who can neither see nor hear, and will offer help with those emotional and psychological problems that exist in a home where there is a severely handicapped child.

■ R. Roy Rusk joined the American Foundation for the Blind on November 1 as director of the program planning department. In this capacity, he will administer all Foundation activities related to the development of national and local services for visually handicapped people. Mr. Rusk, who is a native of Iowa, received an AB degree from San Francisco State College upon whose faculty he later served, and did graduate work in community organization at Stanford University.

Just prior to joining the Foundation, Mr. Rusk was consultant, international program, National Multiple Sclerosis Society. Prior to that he served as executive director, San Francisco Society for Crippled Children and Adults; associate executive director, the National Recreation Association; and in various executive capacities with the Arthritis Foundation.

■ Joel R. Hoff has been appointed principal of the unit for deaf pupils at the Florida School for the Deaf. Prior to accepting this position, Mr. Hoff had been, since 1962, head of the department for deaf-blind children at Perkins School for the Blind.

■ I.C.E.BY. officers for 1967-1972, elected at the international organization's August meeting at Perkins School for the Blind in Watertown, Mass., are Tore Gissler, Sweden, chairman of the executive committee; Don Angel Foz Tena, Spain, vice-chairman; Valdemar Paaske, Denmark, secretary; and Sra. Ana Maria Benard da Costa, Portugal, Mr. S. Armstrong, Canada, Sra. D. de Gouvea Nowill, Brazil, K. N. K. Jussawala, India, M. B. Nnoma, Ghana, S. O. Myers, United Kingdom, Dr. F. Tonkovic, Yugoslavia, and Dr. H. Garbe, assistant secretaries.

At the same meeting, the name of the organization was changed from International Conference of Educators of Blind Youth to International Council of Educators of Blind Youth—the initials remain the same.

Coming Events

December 6-9 American Public Welfare Association, Biennial Round Table, Washington, D.C.

January 24-27 Council on Social Work Education, Minneapolis, Minn.

February 17-21 American Association of School Administrators, Atlantic City, N.J.

April 14-20 Council for Exceptional Children, New York, N.Y.

May 26-31 National Conference on Social Welfare, 95th Annual Forum, San Francisco, California

May 27-29 National Rehabilitation Association, Region II Convention, New York, N.Y

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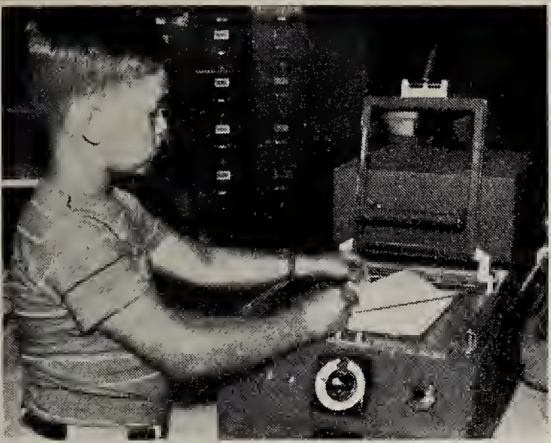

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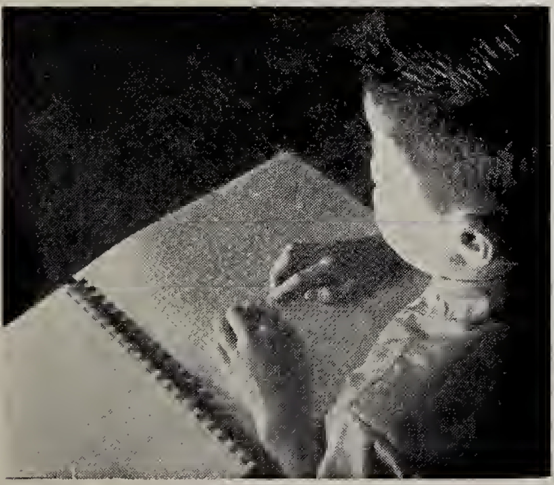

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